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ABSTRACT

Detailed information is provided on each of eight states included in a study of selected education finance characteristics. The eight states are Delaware, North Carolina, and Washington (States with a high level of state funding relative to total state-local funds for education); New York, Michigan, and California (moderate state aid states); and Colorado and New Hampshire (low state aid states). School district fiscal characteristics such as per pupil property values, property taxes and rates, and income characteristics by type of school district are described. The major factor explaining disparities in per pupil expenditures is teacher characteristics (salaries, years of teaching, and level of education). (For related document, see ED 058 473.) (Author/CK)

PUBLIC SCHOOL FINANCE: PRESENT DISPARITIES AND FISCAL ALTERNATIVES

Volume II

Prepared by The Urban Institute

Submitted to The President's Commission on School Finance

HA 000 783

THIS IS ONE OF SEVERAL REPORTS PREPARED FOR THIS COMMISSION. TO AID IN OUR DELIBERATIONS, WE HAVE SOUGHT THE BEST QUALIFIED PEOPLE AND INSTITUTIONS TO CONDUCT THE MANY STUDY PROJECTS RELATING TO OUR BROAD MANDATE. COMMISSION STAFF MEMBERS HAVE ALSO PREPARED CERTAIN REPORTS.

WE ARE PUBLISHING THEM ALL SO THAT OTHERS MAY HAVE ACCESS TO THE SAME COMPREHENSIVE ANALYSIS OF THESE SUBJECTS THAT THE COMMISSION SOUGHT TO OBTAIN. IN OUR OWN FINAL REPORT WE WILL NOT BE ABLE TO ADDRESS IN DETAIL EVERY ASPECT OF EACH AREA STUDIED. BUT THOSE WHO SEEK ADDITIONAL INSIGHTS INTO THE COMPLEX PROBLEMS OF EDUCATION IN GENERAL AND SCHOOL FINANCE IN PARTICULAR WILL FIND MUCH CONTAINED IN THESE PROJECT REPORTS.

WE HAVE FOUND MUCH OF VALUE IN THEM FOR OUR OWN DELIBERATIONS. THE FACT THAT WE ARE NOW PUBLISHING THEM, HOWEVER, SHOULD IN NO SENSE BE VIEWED AS ENDORSEMENT OF ANY OR ALL OF THEIR FINDINGS AND CONCLUSIONS. THE COMMISSION HAS REVIEWED THIS REPORT AND THE OTHERS BUT HAS DRAWN ITS OWN CONCLUSIONS AND WILL OFFER ITS OWN RECOMMENDATIONS. THE FINAL REPORT OF THE COMMISSION MAY WELL BE AT VARIANCE WITH OR IN OPPOSITION TO VIEWS AND RECOMMENDATIONS CONTAINED IN THIS AND OTHER PROJECT REPORTS.

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PUBLIC SCHOOL FINANCE:
PRESENT DISPARITIES AND FISCAL ALTERNATIVES

VOLUME II: ANALYSIS OF INDIVIDUAL STATES

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A Report Prepared for the President's Commission on School Finance

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VOLUME II

TABLE OF CONTENTS

CHAPTER PAGE

TABLE OF CONTENTS.. ii

LIST OF TABLES... vi

INTRODUCTION: ANALYSIS OF INDIVIDUAL STATES....................... 1

HIGH STATE AID STATES.. 3

DELAWARE... 4

PART I INTER-DISTRICT REVENUE COMPARISONS.......................... 7

I. Revenue Sources and Their Impact on Disparities...... 7

II. Fiscal Characteristics of School Districts........... 10

III. Student Characteristics............................. 15

PART II INTER-DISTRICT EXPENDITURE COMPARISONS..................... 17

I. Expenditure Differentials............................. 17

II. Teacher Characteristics.............................. 20

SUMMARY.. 23

DISTRICT LIST BY COUNTY.. 25

DATA SOURCES... 26

NORTH CAROLINA... 28

PART I INTER-DISTRICT REVENUE COMPARISONS.......................... 31

I. Revenue Sources and Their Impact on Disparities...... 31

II. Fiscal Characteristics of School Districts........... 34

III. Student Characteristics............................. 39

PART II INTER-DISTRICT EXPENDITURE COMPARISONS..................... 41

I. Expenditure Differentials............................. 41

CHAPTER PAGE

II. Teacher Characteristics.......................... 44

SUMMARY... 47

SAMPLE DISTRICT LIST BY COUNTY.......................... 49

DATA SOURCES.. 52

WASHINGTON.. 53

PART I INTER-DISTRICT REVENUE COMPARISONS............... 56

I. Revenue Sources and Their Impact on Disparities...... 56

II. Fiscal Characteristics of School Districts.......... 59

III. Student Characteristics............................ 62

PART II INTER-DISTRICT EXPENDITURE COMPARISONS.......... 64

I. Expenditure Differentials............................ 64

II. Effect of Teacher Characteristics on Expenditure Differentials.................................... 67

SUMMARY... 71

SAMPLE DISTRICT LIST BY COUNTY.......................... 73

DATA SOURCES.. 75

MODERATE STATE AID STATES............................... 77

CALIFORNIA.. 78

PART I INTER-DISTRICT REVENUE COMPARISONS............... 80

I. Revenue Sources and Their Impact on Disparities...... 80

II. Fiscal Characteristics of School Districts.......... 84

III. Student Characteristics............................ 87

PART II INTER-DISTRICT EXPENDITURE COMPARISONS.......... 90

I. Expenditure Differentials............................ 90

II. Effect of Teacher Characteristics on Expenditure Differentials.................................... 93

SUMMARY... 95

CHAPTER PAGE

SAMPLE DISTRICT LIST BY COUNTY.......... 97

DATA SOURCES.......... 101

MICHIGAN.......... 103

PART I INTER-DISTRICT REVENUE COMPARISONS.......... 105

I. Revenue Sources and Their Impact on Disparities.......... 105

II. Fiscal Characteristics of School Districts.......... 107

III. Student Characteristics.......... 112

PART II INTER-DISTRICT EXPENDITURE COMPARISONS.......... 117

I. Expenditure Differentials.......... 117

II. Teacher Characteristics.......... 121

SUMMARY.......... 125

SAMPLE DISTRICT LIST BY COUNTY.......... 126

DATA SOURCES.......... 129

NEW YORK.......... 130

PART I INTER-DISTRICT REVENUE COMPARISONS.......... 132

I. Revenue Sources and Their Impact on Disparities.......... 132

II. Fiscal Characteristics of School Districts.......... 136

III. Student Characteristics.......... 141

PART II INTER-DISTRICT EXPENDITURE COMPARISONS.......... 144

I. Expenditure Differentials.......... 144

II. Impact of New York City on Average Statewide Expenditures.......... 148

III. Effect of Teacher Characteristics on Expenditure Differentials.......... 148

SUMMARY.......... 152

SAMPLE DISTRICT LIST BY COUNTY.......... 154

DATA SOURCES.......... 157

CHAPTER PAGE

LOW STATE AID STATES.......... 158

COLORADO.......... 159

I. Revenue Sources.......... 160

II. Fiscal Characteristics of School Districts.......... 162

III. Student Characteristics.......... 163

IV. Teacher Expenditure Differentials.......... 164

SUMMARY.......... 165

SAMPLE DISTRICT LIST BY COUNTY.......... 167

DATA SOURCES.......... 169

NEW HAMPSHIRE.......... 170

I. Revenue Sources and Their Impact on Disparities.......... 171

II. Fiscal Characteristics of School Districts.......... 173

SUMMARY.......... 177

SAMPLE DISTRICT LIST BY COUNTY.......... 178

DATA SOURCES.......... 179

LIST OF TABLES

Table	Title	Page
D-1	Fiscal Capacity Measures	12
D-2	Delaware - Expenditures by Function (1968-1969)	18
NC-1	Combined State-Local Tax Burdens for Education: Urban Areas	38
NC-2	North Carolina - Expenditures by Function (1968-1969)	42
W-1	Washington - Expenditures by Function (1968-1969)	65
W-2	Education and Experience by Type of Districts: (1968-1969)	69
CAL-1	California - Expenditures by Function (1968-1969)	91
M-1	Minority Enrollment and Fiscal Characteristics Michigan	116
M-2	Michigan - Expenditures by Function (1968-1969)	118
M-3	Michigan Teacher Salary Schedules (1968-1969)	121
NY-1	New York - Expenditures by Function (1968-1969)	145
NY-2	Impact of New York City on Average Statewide Expenditures	149
NH-1	Property Tax Rates for Public Services	175

VOLUME II

ANALYSIS OF INDIVIDUAL STATES

The primary objective of this volume is to provide detailed information for each of the eight states included in this study on selected education finance characteristics. These characteristics were discussed more generally in Chapter II of Volume I.

The data for states is organized first to present the number and type of sample districts chosen, then to describe their school revenues by source of funding, and finally to show the impact of these services on inter-district disparities.

School district fiscal characteristics such as per pupil property values, property taxes and rates and income characteristics by type of school district are described. These fiscal characteristics are related to the proportion of minority students, non-public school enrollment, and student tests scores by type of school districts where such data are available. The combined state-local tax burdens for the support of education by income category are computed.

The major factor explaining disparities in per pupil expenditures is teacher characteristics (salaries, years of teaching, and level of education).

The eight states analyzed here are Delaware, North Carolina and Washington -- states with a high level of state funding relative to total state-local funds for education; New York, Michigan, and California

-- moderate state aid states; and Colorado and New Hampshire -- low state aid states. Since the last two states were not part of the original study, but were added subsequently at the request of the President's Commission on School Finance, only limited data on revenues are examined for these states. No analysis of expenditure patterns was undertaken for these states.

Precautions were taken to provide a high degree of data reliability. The gathering of such a large volume of information from various formal and informal sources and the transmission of the original data from publications or computer tapes through several stages of analysis to the final report may have generated some errors. However, the authors feel confident that such data discrepancies as may exist are not likely to have any significant bearing on the overall relationships determined and the findings and conclusions as presented.

The description of the states presented in the succeeding pages are grouped according to level of state aid, as follows:

HIGH STATE AID

- Delaware
- North Carolina
- Washington

MODERATE STATE AID

- California
- Michigan
- New York

LOW STATE AID

- Colorado
- New Hampshire

3

HIGH STATE AID STATES

STATE OF DELAWARE
(1968 - 1969)

INTRODUCTION

Education in the State of Delaware is financed through a combination of locally raised revenues and general and categorical state aid, plus a small federal supplement. State revenues, for the year 1968-69, excluding state payment for teacher benefits, amounted to 73.7 percent of non-federal education aid, with local revenues contributing the remaining 26.3 percent.[1/] The distribution of total education revenue is 24.8 percent local, 69.4 percent state, and 5.8 percent federal.

General state aid accounts for 83 percent of all state aid to local school districts;[2/] it is distributed on the basis of a flat grant personnel unit formula. Based on classroom units, funds for a predetermined number of positions for each category of employee -- e.g., teacher, custodian, cafeteria worker -- are provided. For example, the formula for the allocation of instructional personnel is as follows:

Kindergarten:	One teacher position for each classroom unit of 50 pupils (in groups of 25 for half day sessions)
Grades 1-6 :	One teacher position for each classroom unit of 25 pupils
Grades 7-12 :	One teacher position for each classroom unit of 20 pupils

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[1/] These values reflect revenues for current operating expenditures. Capital outlay is excluded from the analysis.

[2/] Delaware has only two state categorical grant programs -- the School Construction Fund (under which the state pays 60% of the cost of construction of approved projects) and the Transportation Fund.

Much smaller classroom units are mandated for the physically and mentally handicapped, ranging from a classroom unit of 15 pupils for the mentally handicapped to a classroom unit of 6 pupils for the trainable mentally handicapped.

These positions are funded in accordance with a statewide salary schedule which includes increments for level of preparation and experience. There are also separate state salary schedules for various categories of non-instructional school employees.

Local revenues, raised through the property tax and, to a lesser extent, a capitation tax, are used either to supplement the state schedules or to provide additional positions. However, there is no required local school district participation. Apart from capital costs, a local school district theoretically could operate a complete school program without having to raise any local revenues whatsoever.[3]

The analysis of Delaware includes all 23 regular school districts in the state. These districts were recently consolidated in accordance with an act passed by the legislature.[4] These 23 districts exclude special schools, county-wide vocational schools, and schools on military bases. They include one central city (Wilmington), nine suburban districts, two smaller cities (Dover and Newark), and eleven rural districts. The cumulative average daily attendence of pupils in this analysis includes 96.8 percent of the state total.

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[3] Because state appropriations lag behind rapidly increasing education costs and because of competition for qualified teachers, in 1968-69 all districts in Delaware were supplementing state aid with local revenues to some extent. However, some rural districts were providing only very small amounts of local revenue for education.

[4] In July 1969, the Educational Advancement Act was passed which provided for consolidation of the approximately 48 school districts then in existence to 23 regular school districts and three county-wide vocational school districts. All non-high school districts were eliminated at this time. For purposes of this analysis, 1968-69 data from school districts then in existence were treated as though consolidation had already taken place.

PART I

INTER-DISTRICT REVENUE COMPARISONS

I. REVENUE SOURCES AND THEIR IMPACT ON DISPARITIES

Disparities in total per pupil revenues among districts in the State of Delaware are relatively low. Only New Hampshire, North Carolina, and Washington, of the states studied, have lower disparities. The factors contributing to the disparities in per pupil revenues in the state as a whole and in the various categories of school districts, are discussed below in detail. The primary factor is the difference in locally raised revenues. Considering local revenues alone, disparities among Delaware school districts are exceeded only by those in New Hampshire and North Carolina.

State revenues are strongly equalizing, largely because of the high proportion of state aid relative to local aid rather than because of the nature of the distribution formula. That is, the state formula is essentially distributed as a flat grant, and does not, as in many other states, vary according to local fiscal capacity as measured by the taxable property base per pupil.

Federal revenues appear to have almost no impact on the extent of disparities.

Local Revenues. The statewide average for local revenues in Delaware is $166 per pupil, or 24.8 percent of all education revenue. Wilmington, the only central city in Delaware, provides $180 per pupil from its own tax sources for education, only slightly below the suburban average of $219. There is considerable disparity in funds from local sources among suburban districts.[5/] For example, the affluent Alexis I. DuPont district contributes $401, while De La Warr, one of the poorest districts (both in terms of property wealth and per capita income) raises only $140. Local funds raised by the smaller cities average $187 per pupil. Rural areas raise an average of only $74 per pupil, ranging from $109 per pupil in Cape Henlopen, a resort community, to only $33 per pupil in Woodbridge. The low rural contributions, relative to urban districts, are attributable in part to the personnel classroom unit state aid formula and the state salary schedule, which require no local matching funds. Because of the lower cost of living, a number of rural districts need to provide only minimal local funding to supplement state teacher salary schedules.

State Revenues. Delaware schools receive an average of $464 per pupil, or 69.5 percent of their total revenues, from state sources. The analysis of state revenues excludes an additional $49 per pupil on the average paid directly by the state for social security and pension plans of school personnel. This amount does not appear in any school district budget data and therefore it was not feasible to allocate this item on the school district level. However, it should be noted that average total revenues from all sources would increase by $49 per pupil if this item were included as part of school district expenditures. The state contribution increases from 69.5 percent to 72.8 percent with the addition of

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[5/] v = .32.

this item.

Wilmington, the central city, receives $545 per pupil, well above the state average, while the suburbs average $447, smaller cities $408, and rural areas $494. As would be expected in view of the state distribution formula, outlined earlier, there is relatively little disparity in state aid to districts. The high level of state aid to Wilmington is primarily due to its higher average teacher experience.[6]

Federal Revenues. The average federal payment to school districts in the State of Delaware amounts to $39 per pupil.[7] Federal revenues are concentrated in Wilmington, which receives $91 per pupil, including $73 from Title I funds, while rural areas average $49 per pupil. Suburbs, as in other states, are the lowest recipients of federal funds, receiving less than $13 per pupil. Among rural areas, the disparity in federal aid is considerable, ranging from $158 in Laurel to $12 in Delmar.[8]

Impact of All Revenue Sources on Disparities. The disparities in revenues for all districts, if only local revenues are considered, are substantial, since some rural districts are raising almost no local funds while some suburban districts are raising sizable amounts. The addition of state funds reduces this disparity dramatically, indicating the equalizing effect of a large proportion of state aid despite the flat grant

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6/ Delaware's statewide salary schedule includes additional payments for experience. See Part II for further discussion of this factor.

7/ This value excludes $1.1 million for the Dover Air Base Schools, Title I funds to special schools, and federal programs other than Title I, administered by the State Board of Education.

8/ v = .68.

method of distribution.[9] The inclusion of federal funds has no further impact on disparities.[10] The disparities, when all revenues are considered, are slightly less than in New York, but greater than found in New Hampshire, North Carolina, and Washington.

II. FISCAL CHARACTERISTICS OF SCHOOL DISTRICTS

A. *Income, Per Pupil Property Values, and Property Taxes*. Per capita income in Wilmington is $2,894, considerably below the suburban average of $3,429. The suburban average is substantially increased by the $8,775 per capita income in the Alexis I. DuPont district (highest of any school district in the study) and the $4,301 per capita income in the Alfred I. DuPont district. On the other hand, the income level in a number of suburban districts, such as Stanton and De La Warr, is substantially below the Wilmington average.[11] Among the smaller cities, per capita income in Newark is $2,875, in Dover, $2,064. In rural areas, per capita incomes average only $1,996, ranging from a low of $1,746 in Lake Forest to $2,352 in Seaford. The overall disparity in per capita income in Delaware is one of the highest of any state in the study for which income data were available.[12]

Per pupil income in Wilmington is $16,776, slightly above the suburban average of $16,246. While per pupil income in the Alexis I. DuPont district is $35,834, only two other suburban districts have a higher amount than Wilmington. Stanton, for example, has an average of only $6,687, De La Warr $9,601. Thus, when district income is measured on a per pupil rather than a per capita basis, the central city appears to be better off than the suburbs. This reversal is due to two causes: higher non-public school attendance in Wilmington (discussed in Section III), and the movement of families with school-age children (primarily white households) to the suburbs. Thus, the suburbs have higher percentages of their population in the school-age range (5 to 18 years) -- 30.8 percent in suburbs compared to 27.4 percent in Wilmington in 1970.[13]

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[9] The coefficient of variation is .47 for local funds but drops to .13 with the inclusion of state funds.

[10] The coefficient of variation remains at .13, even after federal funds are included.

[11] The coefficient of variation for per capita income in suburbs is .44, considerably higher than that for other types of school districts.

[12] The coefficient of variation is .41. The differences in per capita income among school districts in the State of New Hampshire were the lowest of the states studied, v = .07.

Per Pupil Property Values.[14] The per pupil property wealth in Wilmington is $30,067, about 20 percent above the state average. Following the pattern of other northern states, it is also above the suburban average of $25,663. The suburbs range widely from a high in the Alexis I. DuPont district of $56,072 per pupil to only $13,767 in the De La Warr District.[15] The average value in smaller cities is $19,984, in rural areas $22,596. A finding of some significance is that rural areas, with only slightly less property wealth than suburbs, had only half the per pupil income. Table D-1 compares the three measures of fiscal capacity.

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[13] According to the U. S. Census of Population.

[14] Analysis of property values must rely on the official state-provided equalization ratios. However, these ratios do not reflect differences in assessment practices. According to a sales-to-assessment value study undertaken in Wilmington and New Castle County, vacant lots and land were most seriously under-assessed. Within classes of property, dispersion measures indicated that the greatest assessment inequities exist outside Wilmington.

[15] The coefficient of variation is .46, greater than that found among any of the other categories of districts.

TABLE D-1

FISCAL CAPACITY MEASURES

	Per Capita Income	Per Pupil Income	Per Pupil Property Value
Central City	$2,794	$16,795	$30,067
Suburbs	3,429	16,246	25,633
Smaller Cities	2,627	10,873	19,984
Rural	1,996	8,656	22,596
TOTAL STATE AVERAGE	$2,793	$13,178	$24,330

In general, property values in Delaware appear low relative to other states on the basis of per capita income comparisons. This may be due to unrealistic assessed-to-market values in Delaware compared to other states.

Property Tax Rates.[16/] This study has briefly investigated the issue of "municipal overburden" for the State of Delaware.[17/] While school district taxes comprise only 35 percent of all property taxes in Wilmington, they constitute about 60 percent of all taxes in the suburban school districts. Total effective property tax rates (including the school tax) is $2.70 per $100 market value in Wilmington, compared to $1.44 in Newark and $1.04 in the affluent Alexis I. DuPont school district. This is due to differences in expenditures for other public services.

16/ There are no statutory limits on the amount of taxes that can be levied (except in the case of Wilmington), but all local school district property taxes are subject to referenda.

17/ The term "municipal overburden" generally refers to the property taxes necessary to support the higher costs of non-educational public services -- such as police and fire protection, health care -- in central cities compared to other types of districts. The question of "municipal overburden" was also examined in the states of North Carolina and New Hampshire.

Wilmington spends twice as much for police as the balance of New Castle County, which has a population more than twice as great as that of Wilmington, and spends about the same amount for recreation and public works. The degree to which these differentials reflect differences in quality of service or taste cannot be ascertained from this analysis.

Effective tax rates for schools in Delaware, averaging $0.49 per $100 market value, are the lowest of any state in the study, reflecting the high state aid to education. The rates are highest in Wilmington at $0.66 per $100 market value, $0.59 in the suburbs, $0.55 in the two smaller cities and $0.22 in rural areas. As noted previously, a number of rural areas do not supplement teacher salaries beyond the level of the state salary schedule. It should also be noted that rural areas utilize the capitation tax (a tax levied on all residents 21 years of age or older) for schools to supplement local property taxes. No district relies exclusively on the capitation tax for local school revenues. Personal property taxes were abolished by the legislature.

B. State and Local Taxes for Education

State taxes. The major source of state revenue is a graduated personal income tax, which provides 45.6 percent of all general fund revenue. The two other major sources of taxation are the corporate income and corporate franchise tax. The franchise tax is on all corporations incorporated in Delaware, regardless of their place of business. Probably over 90 percent of this tax is shifted out-of-state. In addition, a large component of the state corporate tax is paid by out-of-state residents. In view of these revenue sources, Delaware is one of the few states in the nation that does not impose a sales tax.

The state allocated 35.5 percent of its general revenue budget for elementary and secondary education in 1968-69. A low income urban household earning between $2,000 and $3,000 pays 1.2 percent of its income for schools via the state tax structure, a household earning between $7,500 and $9,999 pays 2.0 percent, and those earning over $15,000 pay 2.5 percent.

Local Taxes. Property tax rates are low in Delaware, and thus the share of residential property tax on urban households is relatively low, ranging from 3.4 percent for households earning between $2,000 and $2,999 to 0.9 percent for households earning over $15,000. The estimation of burdens for income groups in this state includes the impact of the highly regressive capitation tax, primarily utilized in rural areas, which provides 5 percent of local school revenue on a statewide basis.

Combined State/Local Taxes. The total state-local tax rate for the support of public schools is regressive in urban areas up to incomes of $5,000 and proportional for income classes between $5,000 and $15,000. In the $15,000 and over category, the combined education tax burden of 3.4 percent is higher -- but only slightly higher -- than those for households with incomes between $5,000 and $14,999.

In Delaware, residential property and vacant lots comprise 67.8 percent of the property base, acreage and farms, an additional 2 percent; and industrial, 10 percent. Part of the industrial property tax burden is shifted outside the state. The household property tax rates estimated in this analysis do not reflect commercial and industrial property taxes shifted forward within the state to consumers in the form of higher prices or shifted backward to owners of capital.

III. STUDENT CHARACTERISTICS

In Wilmington, 69.7 percent of all students are from minority groups, primarily black. In contrast, suburban black enrollment is only 4.9 percent, and even this figure reflects a concentration of blacks in a district adjacent to Wilmington -- De La Warr -- which has the characteristics of a central city district. In other suburban districts, nonwhite enrollment averages less than 3 percent. Cities over 10,000 have only 8.3 percent minority enrollment, but rural areas, with a state agriculture structure that is more typical of the South, are over 20 percent black.[18]

Almost one-third of Wilmington students receive Title I aid, while less than 3 percent of suburban enrollment participates in this federal program. In fact, almost half of all students eligible for Title I aid in the state are from the city of Wilmington and one-third are from the rural districts.

Non-public school enrollment is highest in Wilmington, where it comprises over 30 percent of all enrollment. Non-public school enrollment is also substantial in suburban districts. The average suburban district non-public school enrollment is over 15 percent. In the affluent Alexis I. DuPont district, 32 percent of all students attend private schools. In contrast, only 2 percent of rural enrollment attends non-public schools. Most non-public school enrollment, except in rural areas, is parochial. This distribution of non-public school enrollment is significant in determining the impact of utilizing alternative measures of fiscal capacity.

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[18] The distribution of minority teachers closely follows the distribution of minority students. Wilmington, with a majority black enrollment, has 48.3% of its teachers belonging to minority groups. In the suburbs, minority teachers comprise only 4.6 percent of the instructional staff. The percentage of minority teachers statewide is 12.9 percent.

As noted in the preceding section, in part because of the high non-public school enrollment in the central city of Wilmington compared to its suburbs, a per pupil measure of fiscal capacity as a basis for distributing state funds provides the city with less state revenues than would a per capita measure.

PART II

INTER-DISTRICT EXPENDITURE COMPARISONS

I. EXPENDITURE DIFFERENTIALS

The range in disparities in total per pupil expenditures for the State of Delaware is considerably below that of many of the states studied.[19/] As in the other states included in this study, there are substantial differences in expenditures between the urban and the rural areas of the states.

The principal factor contributing to these overall disparities in expenditures is the difference in instructional costs. Non-instructional costs are almost identical in the central city and the rural districts, in both cases being somewhat higher than such costs in either the suburban or smaller city districts. A detailed discussion of the expenditure pattern among the four types of districts follows. Table D-2 also provides a more complete picture of the distribution of expenditures by function.

Because teacher expenditures account for such a large part of the total differentials in school district spending, Section II examines four factors affecting the differences in expenditures for teachers: pupil-teacher ratios, education levels, experience levels, and salaries for equivalent education and experience.

19/ The coefficient of variation for total per pupil expenditures is .13.

TABLE D-2

DELAWARE - EXPENDITURES BY FUNCTION
(1968-1969)

	Central Cities		Suburban		Smaller Cities		Rural		Statewide Average	
	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent
Total Instructional	$616	77.8%	$518	76.6%	$470	74.7%	$420	71.4%	$493	75.2%
Principals & Supervisors	51	6.4	27	4.0	23	3.7	19	3.2	27	4.1
Teachers	495	62.5	409	60.5	381	60.6	339	57.7	394	60.1
Other Instructional Personnel	23	2.9	32	4.7	26	4.0	19	3.2	26	4.0
Other Instructional Expenditures	47	6.0	50	7.4	40	6.4	43	7.3	46	7.0
Total Non-Instructional	163	20.6	154	22.8	148	23.5	164	27.9	157	23.9
Administration	38	4.8	34	5.0	29	4.6	28	4.8	32	4.9
Transportation	7	.9	23	3.4	36	5.7	46	7.8	30	4.6
Plant Operation	76	9.6	69	10.2	61	9.7	65	11.0	67	10.2
Plant Maintenance	17	2.1	12	1.8	8	1.3	11	1.9	12	1.8
Other Non-Instructional	25	3.2	16	2.4	14	2.2	14	2.4	16	2.4
Total Instructional & Non-Instructional	779	98.4	672	99.4	618	98.2	584	99.3	650	99.1
Total Fixed Charges & Other Miscellaneous Services*	13	1.6	4	.6	11	1.8	4	.7	6	.9
Total COE	$792	100.0%	$676	100.0%	$629	100.0%	$588	100.0%	$656	100.0%

*Excludes $49 per pupil paid by state for teacher social security and pension funds.
This increases state average per pupil expenditures to $705.

Total Current Operating Expenditures. Statewide average expenditures of $656 per pupil are substantially below the level of other sample states, with the exception of North Carolina. However, this per pupil expenditure level is somewhat misleading, since an average of $49 per pupil for social security and pension funds for school employees, paid directly by the state, is excluded from the school district budgets. The inclusion of these teacher benefits increases average expenditures to $705 per pupil, only slightly below the average of California. In addition, as noted previously in the discussion of federal revenues, federal aid is slightly understated.

Wilmington has the highest total expenditure, $779 per pupil, while suburbs spend $672, other cities $618, and rural areas $584. This repeats the pattern discerned in the other states in this study. Thus, despite the state distribution formula and the high level of state aid, there is a considerable expenditure gap between urban and rural districts. Among suburban districts, the $915 per pupil expenditure of the Alexis I. DuPont district sharply exceeds the level of all other suburban districts.

Instructional Expenditures. The cost of instruction averages 75 percent of total current expenditures, close to the average of all the states in this study. Total expenditures per pupil in the central city is $107 more than average suburban per pupil expenditures; over 90 percent of this is due to differences in salaries for classroom teachers and principals. Among suburbs, there is a wide range in instructional staff costs: $570 per pupil in the Alexis I. Dupont district, and in the New Castle district, only $455.

Most of the expenditure difference between urban and rural districts is also due to instructional salary differentials. Wilmington spends

$495 per student for classroom teachers, suburbs $409, rural areas only $339. The cost of principals and supervisors in Wilmington is $51, but drops to $19 in rural districts.

Non-Instructional and Other Expenditures. Total non-instructional expenditures average $157, close to the average of all states in the study. These expenditures comprise 24 percent of all costs, with expenditures for plant operation the largest item among non-instructional functions. Administrative costs, in absolute dollar terms, are higher in Wilmington than in the balance of the state, but are a lower proportion of total expenditures. Transportation is a minor item in Wilmington, while it averages $46 per pupil in rural districts. Both operateion and maintenance costs are higher in the central city relative to suburbs and the balance of the state. Other non-instructional costs (such as food and health services) are also consistently higher in Wilmington compared to the balance of the state.

As noted previously, instructional staff fixed costs do not include benefit payments. The addition of $49 per pupil for state-paid benefits would bring the amount spent for fixed costs close to the average of the other states studied.

II. TEACHER CHARACTERISTICS

In Wilmington, the average teacher salary is $10,616. This exceeds every other school district in the state, and is also considerably above the suburban average of $9,179.[20] Highest average salaries among suburban districts are found in Mt. Pleasant ($10,557) and Alexis I. DuPont ($10,138). The smaller cities of Delaware have average teacher salaries of less than $8,600, while the rural average is $7,828.

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[20] Average teacher salary values have been obtained by dividing total expenditures for teachers by the number of teachers. Thus, these values may not represent exact salaries.

In salary structure, the pattern follows other states in this study, with central city teachers receiving the highest salaries, rural teachers the lowest. Salary differences between types of districts are due to the amount of local salary supplement to the state schedule, as well as to the education and experience differentials of the teachers.

Starting salaries in Wilmington of $6,400 for a teacher with a B.A. and no experience are slightly below the suburban average of $6,448 but substantially above the $6,108 rural average.

Average years of experience vary substantially among the four categories of districts. Wilmington teachers average 11.1 years, explaining the high salary structure, suburban teachers only 8.6 years, and those in rural areas 9.5 years.

About 25 percent of all teachers in Wilmington have advanced degrees, somewhat below the 28 percent average in suburban districts. In the affluent Alexis I. DuPont district, 37.4 percent of its teachers have advanced degrees, Alfred I. DuPont 42.3 percent. In these districts, however, the lower experience level of teachers more than offsets salary increments for advanced degrees. As a result, average salaries are higher in Wilmington than in the suburbs, despite the fact that the proportion of teachers with advanced degrees is less. As in other states, rural teachers have the fewest advanced degrees, 16 percent.

Wilmington has 21.4 pupils per teacher, a slightly lower ratio than found in the suburbs.[21] Only the affluent Alexis I. DuPont district has a lower ratio -- 21.1 pupils per teacher. Smaller cities and rural districts have slightly higher pupil-teacher ratios than found in the metropolitan area, but the differences throughout the state are low -- no doubt attributable to the fact that state funds are distributed in accordance with the personnel classroom unit formula. In all three of the high state aid states examined in this study -- North Carolina, Washington, and Delaware -- only minor differences in pupil-teacher ratios are found. In North Carolina and Delaware, even the large urban and affluent suburban districts rely overwhelmingly on state revenues to pay for teachers.

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[21] This low pupil-teacher ratio is probably due in part to the large number of additional teachers funded through Title I of ESEA in Wilmington compared to other districts in the state.

SUMMARY

Delaware is one of two states examined with over 70 percent of all revenues provided by the state government, the other being North Carolina. Since suburban districts and the central city of Wilmington supplement state funding considerably, there are substantial revenue disparities between urban and rural parts of the state, although overall disparities are below the average of other states examined in this study.

A number of suburban districts have very high per capita income, although average per pupil property values in the suburbs are substantially below the level of Wilmington. Per pupil income, because of differences in demographic characteristics and non-public school enrollment between the central city and suburbs, is slightly higher in Wilmington than in other types of districts. Property taxes are on real property only and are generally low, particularly in rural districts, most of which provide only small supplements to state aid. Suburbs provide large amounts of local school revenues by imposing on themselves the highest tax rates for schools, but property taxes for all public services including education are considerably lower in the suburbs and smaller cities than in Wilmington.

The state tax structure is progressive, primarily due to a progressive personal income tax which provides almost half of the state general revenue funds, and to the absence of a sales tax. Since local taxes for schools are not high, the combined state-local tax burden for education shows a "U" curve, with the lowest school tax rates for households in the $5,000 to $14,999 income class.

In Wilmington, almost 70 percent of all students are black, compared to below 5 percent in the suburbs. Rural areas of the state contain a significant black enrollment. Non-public school enrollment in Wilmington is 30 percent of the total enrollment, in suburbs 15 percent, while in rural areas, there is practically no non-public school attendance.

Expenditures are higher in Wilmington than in suburbs, smaller cities or rural areas, due to a combination of a high proportion of experienced teachers and Title I aid. However, several affluent suburban areas have the highest expenditures in the state, as a result of more instructional staff (lower pupil-teacher ratios), and more teachers with advanced degrees. Rural area expenditures are about $200 per pupil below the level of Wilmington. Highest average teacher salaries are in Wilmington, although starting salaries in the city are slightly below those of suburbs. Lowest starting and average salaries are in rural districts. These teacher salary differentials account for most of the urban-rural expenditure variation.

DELAWARE
ALL DISTRICTS (Consolidated)
(1968 - 1969)

DISTRICT	COUNTY
Central City	
Wilmington	New Castle
Suburban Areas	
New Castle	New Castle
Claymont	New Castle
Conrad Area	New Castle
De La Warr	New Castle
Alexis I. DuPont	New Castle
Alfred I. DuPont	New Castle
Marshallton-McKean	New Castle
Mt. Pleasant	New Castle
Stanton	New Castle
Smaller Cities	
Newark	New Castle
Dover	Kent
Rural Areas	
Lake Forest	Kent
Milford	Sussex
Smyrna	Kent
Caesar Rodney	Kent
Appoquinimink	New Castle
Delmar	Sussex
Indian River	Sussex
Laurel	Sussex
Cape Henlopen	Sussex
Seaford	Sussex
Woodbridge	Sussex

STATE OF DELAWARE

DATA SOURCES

A major portion of the data for these analyses came from unpublished sources furnished by various state agencies. The following is a partial list of published sources also drawn upon for this study:

Budget and Financial Report of the State of Delaware for the Fiscal Years Ending June 30, 1969, 1970, and 1971. For submission to the 125th General Assembly of Delaware, Second Session, by Russell W. Peterson, Governor, January 21, 1970.

Delaware Chamber of Commerce, Inc. *Directory of Commerce and Industry, State of Delaware, 1970*. Wilmington: Delaware State Chamber of Commerce, Inc., April, 1970.

Delaware Department of Public Instruction, Statistical Section. *Annual Report 1967-1968 and 1968-1969*. Dover: State of Delaware.

__________________, Division of Research. *Assessments and Tax Rates, Delaware Public Schools, 1968-1969*. Dover: State of Delaware, July, 1968.

__________________, Division of Research. *Research Report: Educational Personnel in Public Schools*. Dover: State of Delaware, April 1, 1970.

Delaware Department of State. *General Corporation Law of the State of Delaware; Franchise Tax Law*. Dover: State of Delaware, 1970.

Delaware State Education Association. *Teacher's Salary Schedules 1968-1969, State of Delaware.* Dover: Delaware State Education Association, June 25, 1968.

Delaware Tax Department. *Statistical Report (For Fiscal Year ended June 30, 1969).* Dover: State of Delaware.

__________________. *Business Licenses and Taxes*. Dover: State of Delaware, July, 1969.

__________________. *Occupational Licenses and Taxes*. Dover: State of Delaware, July, 1969.

________________________, Office of the Commissioner. Annual Report. (For the Fiscal Year Ended June 30, 1968). Dover: State of Delaware.

U.S. Bureau of the Census, Census of Manufacturers. 1967 Areas Series: Delaware. MC 67 (3) - 8. Washington, D.C.: U.S. Government Printing Office, 1970.

STATE OF NORTH CAROLINA
(1968-1969)

INTRODUCTION

Education in the State of North Carolina is financed through a combination of locally raised revenues, general and categorical state aid, plus federal revenues. In the sample districts studied, state revenues for the year 1968-69 amounted to 78.2 percent of non-federal education aid with local revenues contributing the remaining 21.8 percent.[1] Total education revenues to the sample districts are in the following proportions: 19.0 percent local, 68.2 percent state, and 12.8 percent federal.

General state aid amounts to 92 percent of all state aid to local school districts. These funds are distributed on the basis of a flat grant personnel unit formula. That is, a predetermined number of teacher positions is allocated for a certain number of students, the number varying in accordance with the type of pupil involved.[2] The formula for the allocation of teachers is as follows:

Grades 1 - 3:	Six teacher positions for the first 153 pupils, plus 1 teacher position for each additional 27 pupils.
Grades 4 - 8:	Six teacher positions for the first 171 pupils, plus 1 teacher position for each additional 30 pupils.

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[1] These values exclude state pension plan payments which increase the state share to $398 or 79.8 percent of non-federal education revenues.

[2] Unlike the state aid personnel unit formula in Delaware, only professionals are allocated in this manner. In Delaware, custodians, cafeteria workers, and other non-professional categories of employees are also allocated in this fashion.

Grades 9 - 12: Four teacher positions for the first 80 pupils for the first high school, three teacher positions for the first 60 pupils for each additional high school, and 1 teacher position for each additional 30 pupils.

These positions are funded in accordance with a statewide salary schedule which includes increments for level of preparation and years of experience.

The state provides funds for transportation, clerical assistance, instructional supplies, and library books on a per pupil basis, while funds for plant operation are allotted per teaching position. School districts must pay for almost all plant maintenance costs out of local revenues.

Local revenues, raised primarily through the property tax, can be used either to supplement the state salary schedule, to provide additional teacher positions, or to supplement other functions. However, there is no required local district participation. Apart from capital costs and plant maintenance costs, a local school district theoretically could operate a complete school program without having to raise any local revenues whatsoever.

The grouping of school districts by type in North Carolina differs from the pattern followed by this report in other states. Central city school districts are defined as those districts with a city population of over 50,000 and which are administratively independent school district units. Treated as a separate category are countywide school districts, such as Charlotte-Mecklenburg, which includes the largest city in the state (Charlotte) but also includes non-urban areas. There are no suburban school districts. This is because cities which constitute independent school districts are surrounded by "balance of county" school districts; these latter may incorporate both other cities (which are not independent school districts) and rural areas of the county.

Smaller city school districts are defined as those districts with a city population of 10,000 to 50,000 and which are administratively independent. Rural districts are defined as those districts which contain no communities within their boundaries with more than 10,000 residents, and they are generally countywide. The total sample includes both single and multi-county administrative districts. The 91 districts in the sample have an average student population (in Average Daily Attendance) of 8,970 students. These districts contain 73.0 percent of total state ADA. The balance of state ADA is concentrated in rural districts.

Districts selected for this study are grouped as follows:

	Type of District[3]	Number of Districts	Average ADA
(1)	Cities over 50,000 which are Independent Administrative Units	5	16,889
(2)	"Balance of County" Districts surrounding Cities in Category (1)	4	19,182
(3)	Countywide Metropolitan (SMSA) Districts	2	61,474
(4)	Smaller Cities with Independent Administrative Units	19	5,193
(5)	"Balance of County" Districts around Cities in Category (4) and Countywide Districts with Cities over 10,000	20	11,322
(6)	Rural Districts	41	4,932
	ALL SAMPLE DISTRICTS	91	8,917

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[3] For the inter-state comparisons discussed in Chapter II, Vol. I, categories (1), (4), and (6) are utilized. State average values, however, are based on all 91 districts selected.

PART I

INTER-DISTRICT REVENUE COMPARISONS

I. REVENUE SOURCES AND THEIR IMPACT ON DISPARITIES

The disparity in total per pupil revenues among districts in North Carolina is lower than in all other states studied except New Hampshire.[4]

The distribution of the various revenue sources and their impact on the disparities in total per pupil revenues are discussed in the following sections. As with the other states in this study, the difference in local funds is the primary factor contributing to disparities among districts.

Local Revenues. Local revenues vary sharply in the state. Local funds comprise 19.0 percent of all education revenues on a statewide basis, or $101 per pupil. In the larger cities, however, local revenues of $161 per pupil constitute 28.9 percent of their revenue. In smaller cities, local revenues amount to $100 per pupil, 19.2 percent of their total funding. In rural districts, only $61 , 11.3 percent of their total funding, comes from local sources. There is little variation in the amount of local revenues among large cities. In rural areas, however, there are sharp differences in local funding.[5] A number of rural counties such as Alexander County and Iredell County, contribute less than $40 per pupil locally. In contrast, other schools in rural counties raise more than $100 per pupil from local sources.

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[4] The coefficient of variation is .10 in North Carolina and .09 in New Hampshire. (See Table II-3, Chapter II, Vol.I.)

[5] The coefficient of variation in local revenue is .15 in the larger cities, .45 in rural areas.

State Revenues. State aid amounts to 68.2 percent of all education revenues received by local school districts in the sample, an average of $363 per pupil. The state provides $359 per pupil to the larger cities, $356 to smaller cities, and $380 to rural districts. Thus, there is little variation in state aid to different types of districts.[6] The reason for this is the state distribution formula, which is based on a flat grant personnel unit rather than being distributed in an attempt to partially equalize differences in local property wealth, as in many of the states in this study. Among larger cities, the range is from $345 per pupil in Raleigh to $378 in Asheville.

Transportation costs paid by the state average $20 per pupil in rural areas, compared to less than $1 per pupil in urban districts. This item explains most of the difference in total state aid between urban and rural regions.

State funds allotted for teacher salaries are $258 per pupil in central cities, $249 in smaller cities, and $245 in rural areas. Total state funding for teachers to cities exceeds the rural average due to the higher proportion of teachers in urban areas with advanced degrees. The state salary schedule provides additional increments for teachers with advanced degrees who are hired to fill the state-allotted positions.

Federal Revenues. Federal funds provide an average of $68 per pupil to the sample districts in North Carolina, more dollars than are given to any other state studied. Because of low over-all funding, federal revenues total 12.8 percent of all school revenues, considerably above the federal proportion in the other states. Federal revenues to the largest cities average $43, to smaller cities $68, and to rural areas, $96. The latter amount is 64 percent more than average _local_ per pupil revenues raised by rural districts. Gates County received $136 in federal funds while raising $48 locally; Anderson County received $138 and raised $54. In rural districts such as these, where local revenues are minimal, federal aid is an important element of the budget.

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[6] The coefficient of variation is quite low -- v = .05.

Impact of All Revenue Sources on Disparities. The primary factor contributing to disparities in total per pupil revenues in the State of North Carolina, as in other states, is the differences among districts in the amount of local revenues raised. In fact, the disparities in local revenues are greater in this state than in any of the other states studied. (See Table II- 3 in Chapter II). State revenues, because they comprise such a large proportion of all education funds, reduce these disparities considerably. The addition of federal funds further reduces the disparities.[7/]

As in other states in the study, there is a negative correlation between state and local revenue,[8/] meaning that state funds are lower where local funds are higher.

[7/] The coefficient of variation in local revenues is .54, but drops to .12 with the introduction of state funds. With the addition of federal funds, the coefficient of variation drops to .10.

[8/] r=.50.

II. FISCAL CHARACTERISTICS OF SCHOOL DISTRICTS

A. Fiscal Measures of Ability to Pay

Property Wealth[9] and Property Tax Effort. The average property wealth in North Carolina is $28,964 per pupil, lower than other states in the study with the exception of Delaware.[10] The two metropolitan county-wide districts (Mecklenburg and Forsyth Counties) have an average property value of $35,812, about 25 percent above the state average. Among the large city districts, Asheville and Raleigh City are more than 50 percent above the state average with $40,160 and $44,529 per pupil respectively. A number of smaller cities have relatively high property values, including the college community of Chapel Hill ($40,140) and the city of Lenoir ($49,219). With the exception of Durham, cities in North Carolina have higher property values than the balance of the county in which they are located. Rural districts have an average property value of about $23,000. This follows the national pattern of lowest intra-state property wealth in rural districts.

Real and personal property tax rates for schools in North Carolina are low, no doubt due to the high level of state financing for education.[11]

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[9] North Carolina taxes both real and personal property.

[10] Delaware on the other hand, has a substantially higher per capita income level, but does not tax personal property.

[11] Real property provides 65.5 percent of revenues for schools, personal property, including railroads and utilities, 34.5 percent.

Metropolitian districts have the highest effective tax rates, averaging $0.67 per $100 of market value. Mecklenburg County as well as all districts located in metropolitan counties, with the exception of Durham and Forsyth Counties, have above state average rates. Among smaller cities, Chapel Hill, despite its high per pupil property value , also has the highest tax rate, $0.89 per $100 market value. Thus, Chapel Hill follows other university communities in the states in this study in taxing itself substantially to provide large local revenues. City school districts located in metropolitian counties consistently tax themselves at higher rates relative to the "balance-of-county" districts. Rural areas have somewhat lower tax rates than urban areas, with a number of districts having tax rates below $0.35. The average rural tax rate is $.46.

Assessed-to-Market Value Ratios by Type of District. On the basis of the 1967 Census of Government report on assessed-to-market value ratios by type of property, the impact of uniform assessment ratios on funds available for education (or to reduce tax rates) was computed for this study. Acreage and farm property and vacant lots were the most underassessed categories of property. Commercial-industrial property was also assessed at slightly below the level of residential property. In Mecklenburg County, the assessed value of property would increase from $855 million to $965 million, an increase of 11.3 percent, if all property were assessed on the same basis as residential property. This would result in an additional $44 per pupil, assuming tax rates remained unchanged. In more rural counties, such as Pitt, the assessed tax base would increase 14 percent. In many school districts, particularly those in rural areas, the additional dollars generated would increase local revenues for education by 20 percent and more.

In almost all states, land, both rural and urban, is under-assesed compared to residential property. Farmers in rural areas and land developers in urban areas are the beneficiaries of this policy. In view of the differences in assessment practices, the difficulties in establishing a state-wide property tax are evident in North Carolina and in other states.

Per Capita Income. Per capita income in North Carolina follows the pattern of other states, with the larger cities having higher incomes than the smaller cities or rural areas. The five larger cities have a per capita income of $2,525, ranging from Asheville's level of $2,142 to $2,866 in Raleigh City. Mecklenburg County per capita income is $2,142. Smaller cities have an average per capita income of about $1,850 and rural areas, $1,586. Thus, there is a substantial income gap, as in other states, between urban and rural areas.

As would be expected, there is a high positive correlation between local revenues and per capita income and a negative correlation between percent non-white and per capita income.[12]

B. State and Local Taxes for Education

State Taxes. The state general fund derives almost half of its revenue from personal and corporate income taxes. An additional 32.5 percent is obtained from sales taxes, and the balance primarily from excise taxes. The over-all state tax structure for education is progressive. It ranges from 1.6 percent for urban households earning between $2,000 and $2,999 to 3.4 percent for households earning over $15,000. This is due largely to the effect of the personal income tax.[13] Only the state of Hawaii, among the states studied, has higher state taxes than North Carolina.

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[12] The correlation coefficients are .66 and -.41 respectively.

Local Taxes. In North Carolina property tax burdens on real residential property were computed (as for other states) by determining house value to income ratios for metropolitan areas of North Carolina. In addition, other local revenue sources for education were included in the computation. Property taxes are generally low, particularly in rural areas, because of high state funding. In urban areas, local taxes for education range from 2.2 percent for households earning between $2,000 and $2,999 to 0.9 percent for households earning over $15,000. In rural areas, local taxes for education range from 1.8 percent to 0.7 percent for the highest income group.

The state constitution sets no limits on property taxes levied for school purposes, but there are statutory limits on the supplemental levies for school district current expense budgets. The maximum levy is 60 cents per $100 valuation for school districts with a population of 100,000 or more, and 50 cents for school units with less than 100,000 population. In 1969-1970, only four school districts in the state used the maximum rate.

The methodology to estimate local tax burdens for education by income class generally excludes taxes on personal property and on industrial and commercial real property. As such, local tax burdens are somewhat understated. To estimate the impact of the inclusion of industrial and commercial personal and real property taxes on the tax burdens for education by household income groups, these taxes were calculated for the State of North Carolina.[14] (Values based solely on the residential property tax are utilized for inter-state tax comparisons.) The results show that in urban areas, local taxes for the lowest income group increase from 2.2 to 2.4 percent; for incomes between $7,500 and $9,999 from 1.0 percent to 1.2 percent, and for incomes over $15,000, from 0.9 percent to 1.3 percent by the inclusion of industrial and commercial property taxes.

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[13] The maximum rate is now 7 percent on increments of taxable income over $10,000, with graduated rates for taxable incomes below $10,000. The state constitution prohibits use of income tax rates in excess of 10 percent. There are no constitutional or statutory limits on expanding the sales tax base or on raising the rate.

Combined State and Local Taxes. Combined state and local taxes for urban areas of North Carolina are "U" curved, as Table NC-1 shows:

TABLE NC-1

COMBINED STATE-LOCAL TAX BURDENS FOR EDUCATION
URBAN AREAS

	State Taxes for Education	Local Taxes Excluding Industrial & Commercial Property	Local Taxes Including Industrial & Commercial Property	Total Taxes for Education Including Industrial & Commercial Property
$ 2,000-$ 2,999	1.6%	2.2%	2.4%	4.0%
$ 3,000-$ 3,999	1.9	1.7	1.9	3.8
$ 4,000-$ 4,999	1.9	1.3	1.5	3.4
$ 5,000-$ 5,999	2.2	1.2	1.4	3.6
$ 6,000-$ 6,999	2.4	1.2	1.4	3.8
$ 7,500-$ 9,999	2.7	1.0	1.2	3.9
$10,000-$14,999	3.0	1.0	1.2	4.2
$15,000 and over	3.4	0.9	1.3	4.7

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[14] On the basis of the industrial structure of North Carolina, this analysis assumes that one-third of these taxes are shifted to out-of-state residents; of the balance, one-third is shifted backward to owners of the business enterprises, and two-thirds shifted forward to consumers in the state. This is similar to the methodology utilized in this study to estimate the impact of state corporate income taxes.

The highest total tax burden for education falls on the lowest income group -- 4.0 percent, and the two highest income groups -- 4.2 percent and 4.7 percent, while the lowest taxes are in middle-range income groups.

It is interesting to note that New York, with the highest per capita income of states examined, and North Carolina, with the lowest per capita income, are the two states that have the highest over-all taxes for education.

III. STUDENT CHARACTERISTICS

Unlike other states examined in the study, minority (predominantly black) enrollment is high in all types of districts in North Carolina. In the five larger cities, minority enrollment is 33.7 percent; in smaller cities, 37.5 percent; in rural areas, approximately 30 percent. It is more than twice as high in the large cities than in the balance of the surrounding counties. Asheville City has 31.6 percent minority, the balance of Buncombe County, in which Asheville is located, only 3.4 percent. Metropolitan areas in North Carolina appear similar in this respect to northern cities, where the white exodus beyond city boundaries leaves a much higher ratio of blacks in the central cities. In rural areas, the minority enrollment ranges from 1.2 percent in Watauga County to 73 percent in Bertie County.[15/]

In the larger cities, Title I recipients are predominantly black. White Title I recipients in these districts comprise 2.5 percent of total

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[15/] The racial distribution of teachers among categories of districts appears to be similar to that of the students. The percent of non-white teachers is 29.2 percent in large cities, 30.0 percent in smaller cities, and about 28 percent in rural areas. Within types of districts, there is a considerable range of minority teachers -- for example, among larger city districts 23.2 percent of the teachers in Raleigh City are minority while 45.6 percent are minority in Durham City. Among the smaller city districts, Lenoir has only 4.1 percent minority teachers, Goldsboro 43 percent. In the western and predominantly white rural areas, minority teachers comprise less than 10 percent of the total.

ADA, while black recipients constitute 9.2 percent. In rural areas, the proportion of both white and black Title I recipients is higher -- 18.7 percent white, 31.2 percent black. One-half of all rural countywide district students are Title I recipients.

Title I aid averages $39 per student, with larger cities receiving $21 and rural areas $67.

PART II

INTER-DISTRICT EXPENDITURE COMPARISONS

I. EXPENDITURE DIFFERENTIALS

The range in disparities in total per pupil expenditures for North Carolina is low.[16] Differences in instructional costs and in transportation costs are the primary causes of the differences in per pupil spending among types of districts. A detailed discussion of the expenditure pattern among types of districts follows. Table NC-2 also provides a more comprehensive picture of expenditure differentials by function.

Total Current Operating Expenditures. Total current operating expenditures, excluding state-paid pension plans and social security payments, are $532 per pupil in North Carolina. If state-paid teacher benefits are included, the per pupil spending totals $567. Although central cities show higher total expenditures than the smaller city districts, the difference is only $41. Rural areas have higher total expenditures than smaller cities because of transportation cost differentials, but are below the level of the larger cities.

Among the larger cities, current expenditures range from $530 per pupil in Raleigh to $610 in Durham. Mecklenburg, the countywide district which includes the state's largest city, Charlotte, spends $607 per pupil. Smaller city expenditures range from $478 in Statesville to $691 in

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[16] The coefficient of variation is .09.

TABLE NC-2

NORTH CAROLINA - EXPENDITURES BY FUNCTION
(1968-1969)

	Central Cities*		Smaller Cities		Rural		Statewide Average	
	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent
Total Instructional	$392	69.6%	$353	67.6%	$333	62.0%	$358	67.3%
Principals & Supervisors	26	4.6	26	5.0	25	4.6	25	4.7
Teachers	342	60.8	302	57.8	278	51.8	305	57.3
Other Instructional Personnel	4	.7	8	1.5	14	2.6	8	1.5
Other Instructional Expenditures	20	3.5	17	3.3	16	3.0	20	3.8
Total Non-Instructional	94	16.7	83	15.9	110	20.5	97	18.2
Administration	15	2.7	16	3.1	18	3.3	15	2.8
Transportation	1	.2	1	.2	22	4.1	13	2.4
Plant Operation	36	6.3	25	4.7	22	4.1	26	4.9
Plant Maintenance	18	3.2	15	2.9	15	2.8	16	3.0
Other Non-Instructional	24	4.3	26	5.0	33	6.2	27	5.1
Total Instructional & Non-Instructional	486	86.3	436	83.5	443	82.5	455	85.5
Total Fixed Charges & Other Miscellaneous Services	77	13.7	86	16.5	94	17.5	77	14.5
Fixed Charges**	34	6.1	25	4.8	22	4.1	26	4.9
Community Services & Other Costs	43	7.6	61	11.7	72	13.4	51	9.6
Total COE**	$563	100.0%	$522	100.0%	$537	100.0%	$532	100.0%

*Largest five cities which are administratively independent.
**These expenditures include an average per pupil expenditure by the state of $35 for social security and pension plans for school employees. This expenditure cannot be allocated by type of district.

Salisbury. Rural districts show little differences in expenditures. The low disparities are due to two factors: the state distribution formula, described at the outset of this section, and the large geographic areas most school districts cover. Although the sample districts selected for study have a large rural component, countywide rural districts have an average ADA of over 10,000. This means that differences in property wealth which may exist among smaller districts -- such as pockets of industry next to property-poor areas -- are washed out when the district size is such that it encompasses these disparate areas.

Instructional Expenditures. Instructional expenditures are higher in urban than in rural districts, and consequently, this function constitutes a higher share of all costs in urban districts. For example, 61 percent of current expenditures for large cities is allocated for teachers, compared to only 52 percent in rural areas. (These figures exclude state-paid retirement benefits.) Teacher expenditures among the larger cities range from $317 per pupil in Asheville to $357 in Greensboro. Mecklenburg County, which, although it contains the city of Charlotte, is classed as a County-wide Metropolitan District (Category 3) rather than as a large city district, spends the most of any district in the state for teachers, $360 per pupil. Among smaller cities, the range is from $279 in Sanford to $344 in Salisbury. Rural counties show little deviation in expenditures for teachers.

The state funds the bulk, 88 percent, of all teacher expenditures in North Carolina, supplemented to a considerable extent by local revenues in the larger cities, and in rural areas by federal Title I funds, which pay for 6 percent of all teachers in rural districts.

Non-Instructional Expenditures. Non-instructional expenditures are highest in rural areas, where these functions account for $110 per pupil, or 20.5 percent of all expenditures (excluding state-paid teacher benefits). This compares to $94, or 16.7 percent, in the larger cities. Transportation is the major item explaining the difference, ranging from less than $1 in the larger cities to $22 in rural districts. Although the cost of plant operation is lower in rural than in urban areas, other non-instructional expenditures, such as health, are somewhat higher.

Other Expenditures. Other expenditures include community services, teachers' benefits and other fixed charges, and miscellaneous services. Teacher retirement plans and social security payments are paid for primarily by the state on the basis of the state salary schedule. The 1968-69 state payments for retirement and social security average $35 per pupil. The average combined local supplement and federal payments for retirement and social security is $12 per pupil. Local supplement benefit payments are concentrated in urban areas, particularly the larger cities.

II. TEACHER CHARACTERISTICS

A. Pupil-Teacher Ratios. Pupil-teacher ratios are the lowest in the large cities of the state, one teacher per 21.2 pupils.[17] This ratio is slightly lower than that in the two countywide metropolitan districts of Mecklenburg (containing the city of Charlotte) and Forsyth (containing the city of Winston-Salem). Smaller cities average 22.7 pupils per teacher, with little differences among these districts, ranging from 21 pupils per teacher in Salisbury City to 24 in Burlington City. Rural areas have the fewest teachers, one for every 23.9 pupils. The overall deviation from the state average of 23.2 is exceptionally low.[18/] This is attributable to the state personnel unit distribution formula. In large cities, only 14 percent of all teachers are funded from local revenues, and in rural districts a mere 3 percent of all teachers are funded from local sources. An additional 6 percent of all rural teachers are funded from federal revenue, compared to 3 percent in the larger cities, but this difference is insufficient to overcome the lower teacher-pupil ratios in urban areas.

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[17] This is primarily due to additional teachers funded out of local revenue.

Salary Supplements. Teacher salaries are based on state salary schedules. They are considerably below the level in other states, with the exception of Hawaii. Most school districts supplement the state payments, but not to any substantial degree.

Larger cities provide the highest salary supplements to the state schedule -- up to $774 per annum for a teacher with an advanced degree and maximum experience. The city of High Point provides the highest supplement of any of the larger city districts -- $1,094 per annum for a B.A. degree with maximum experience. Among countywide districts, Mecklenburg has a $1,250 salary supplement for a B.A. degree with maximum experience, the highest in the state. This explains why expenditures for teachers and average teacher salaries are highest in that district. Among the 20 countywide districts (Category 5 , which excludes Mecklenburg and Forsyth

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[18/] The coefficient of variation is .05.

Counties), only seven supplement the state salary schedules to any degree. The majority of rural districts provide no salary supplement whatsoever.

Average Salaries. Average salaries are $7,795 in central cities, and $6,502 in those rural counties with more than one administrative unit. Although data on the percentage of advanced degrees or average experience on an individual district basis is unavailable, it appears that the major portion of the differences among districts in average salaries can be accounted for by differences in salary supplements. Another likelihood is the higher proportion of advanced degrees in urban areas.

SUMMARY

Among states examined in this study, North Carolina revenues for education show less disparities than all but one other state. This is primarily due to the high share of state funding for education. Federal funds have a greater impact on revenues in North Carolina than other states examined, particularly Title I aid in rural areas.

Real per pupil property wealth and per capita income wealth is the lowest of any of the states examined, with considerable differences between urban and rural areas in both wealth measures.

Because of a progressive state personal income tax, the overall state general tax fund structure is progressive. While local taxes, including real and personal property taxes, are regressive, those taxes are low, particularly in rural areas. As a result, the combined state-local tax structure is progressive for income groups above $9,000, slightly regressive for the lowest income groups.

North Carolina has the highest share of minority (predominantly black) students and teachers of any state examined. Minority students are found in substantial numbers in most larger cities, small cities and the majority of rural counties.

Total expenditures are lower in North Carolina than other states examined. This appears to be due to lower starting and average salaries for instructional personnel, as well as to lower costs for non-instructional expenditures such as plant operation and maintenance compared to other states.

Expenditures among districts within the state show relatively little variation. Student-teacher ratios, which also show little intra-state variation, are close to the average of other states.

NORTH CAROLINA
SAMPLE DISTRICTS
(1968 - 1969)

DISTRICT	COUNTY
Asheville	Buncombe
Durham	Durham
Greensboro	Guilford
High Point	Guilford
Raleigh	Wake
Buncombe	Buncombe
Durham	Durham
Guilford	Guilford
Wake	Wake
Mecklenburg	Mecklenburg
Forsyth	Forsyth
Albermarle	Stanly
Chapel Hill	Orange County
Fayetteville	Cumberland
Goldsboro	Wayne
Greenville	Pitt
Kinston	Lenoir
Lenoir	Caldwell
Lexington	Davidson
Thomasville	Davidson
Monroe	Uion
New Bern	Craven
Rocky Mount	Edgecomb
Salisbury	Rowan
Sanford	Lee
Mooresville	Iredell
Statesville	Iredell
Elm	Wilson
Wilson	Wilson
Burlington	Alamance

NORTH CAROLINA
SAMPLE DISTRICTS
(1968 - 1969)

DISTRICT	COUNTY
Vance	Vance
Pasquotank	
Gaston	
New Hanover	
Stanly	Stanly
Orange	Orange
Cumberland	Cumberland
Wayne	Wayne
Pitt	Pitt
Lenoir	Lenoir
Caldwell	Caldwell
Davidson	Davidson
Union	Union
Craven	Craven
Nash	Nash
Rowan	Rowan
Lee	Lee
Iredell	Iredell
Wilson	Wilson
Alamance	Alamance
Alexander	Alexander
Andson	Andson
Bertie	Bertie
Bladen	Bladen
Camden	Camden
Caswell	Caswell
Chowan	Chowan
Currituck	Currituck
Davie	Davie
Gates	Gates
Granville	Granville
Harnet	Harnet
Hertford	Hertford
Hyde	Hyde
Johnston	Johnston
Mcon	Mcon
Martin	Martin
Montgomery	Montgomery
Northampton	Northampton
Pender	Pender
Person	Person

NORTH CAROLINA
SAMPLE DISTRICTS
(1968 - 1969)

DISTRICT	COUNTY
Rutherford	Rutherford
Stokes	Stokes
Translyvania	Translyvania
Warren	Warren
Watauga	Watauga
Burke	Burke
Glen Alphine	Burke
Morganton	Burke
Columbus	Columbus
Whiteville	Columbus
Franklin	Franklin
Franklin	Franklin
Lincon	Lincoln
Lincolnton	Lincolnton
Polk	Polk
Tryon	Polk
Sampson	Sampson
Clinton	Sampson
Wilkes	Wilkes
North Wilkesboro	Wilkes

STATE OF NORTH CAROLINA

DATA SOURCES

A major portion of the data for these analyses came from unpublished sources furnished by various state agencies. The following is a partial list of published sources also drawn upon for this study:

Financial Report of (each district): North Carolina Public School System for 1968-1969. Filed with the State Superintendent of Public Instruction, Raleigh: State of North Carolina.

North Carolina Board of Education, Data Processing and Statistical Services. Current Expenditures by Source of Funds, 1968-1969. Raleigh: State of North Carolina.

________________, Office of Controller. State Salary Schedule Superintendents, Associate and Assistant Superintendents, Principals, Supervisors and Teachers 1968-69. Raleight: State of North Carolina.

________________, Statistical Services. North Carolina Public School Survey, 1968 and 1969 and 1970. Raleigh: State of North Carolina.

North Carolina Department of Public Instruction, Statistical Services. 1968-1969 Instructional Personnel. Raleigh: State of North Carolina.

North Carolina Department of Tax Research. Statistics of Taxation, Biennial Report. Raleigh: State of North Carolina, 1970.

North Carolina Education Association, Department of Research. Salaries and Supplemental School Taxes 1968-69. Research Bulletin No. 68-5, Raleigh: State of North Carolina, October, 1968.

North Carolina Tax Study Commission. Report of the Tax Study Commission of the State of North Carolina. Raleigh: State of North Carolina, 1968.

WASHINGTON STATE
(1968 - 1969)

INTRODUCTION

Education in the State of Washington is financed through a combination of locally raised revenues and general and categorical state aid.[1] The amount of aid provided by the state in 1968-69 was considerably greater than that provided by the majority of states in this country, although the state share has dropped considerably in succeeding years. Of the sample districts selected for this study, state revenues amounted to 59.2% of non-federal education aid with local revenues contributing the remaining 40.8%. Of total education revenues in the sample districts for the State of Washington, the proportions are 37.9% local, 56.5% state, and 5.6% federal.[2]

General state aid, which accounts for 83% of all state aid to local school districts, is distributed on the basis of a weighted pupil foundation formula. This program guarantees a certain dollar amount per weighted pupil to each district.[3] To participate in this program, a district must levy the minimum tax rate as determined by the state. The state pays the difference (if any) between the guarantee and the amount raised locally through the required tax rate.[4] Unlike some of the other states in this study, such as New York and California, Washington has no flat grant per pupil aid program.

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[1] Federal aid supplements these revenues to a small extent.

[2] These percentages refer to current operating expenditures only. Capital outlay has been excluded from this analysis.

[3] A pupil enrolled in grades 1 through 6 of the regular program is counted as one, while a pupil enrolled in the secondary grades, a disadvantaged pupil, and a pupil enrolled in a vocational program are counted as one plus a specified fraction. A staff weighting factor based on a combination of education and experience levels is also applied to help meet salary costs.

The analysis of school finance undertaken in the State of Washington is based on a sample of 79 school districts, grouped by type of district.[5] There are three large cities in Washington with a population over 100,000 -- Seattle, Tacoma and Spokane. For purposes of the disparity analysis, Seattle, with a population of over 250,000, is the only central city under the definition used in this report.[6] (Spokane and Tacoma are categorized as smaller cities for this analysis.) The twelve suburban districts, with an average enrollment of 12,600, are located in the vicinity of Seattle. The twenty-seven cities in this sample, with a population of over 10,000 and an average enrollment of about 9,000, include almost all cities of this size in the state. The study also examines thirty-nine rural districts, which have an average enrollment of about 3,400 students. Total average daily attendance of pupils in the sample districts is about 620,000, which comprises 80 percent of total state ADA.

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[4] The state aid formula (for a unified district -- K or 1 through 12) is computed by taking 85% of the revenues that would be raised through a combination of a 14 mill tax on property, the one percent real estate transfer tax (a county tax), the sale of federal lands, in-lieu taxes, and various other district revenue sources, including, in 1968-69, federally impacted areas aid funds. The state makes up the difference between what 85% of these revenues would yield per weighted pupil and the $368 guarantee.

[5] This sample was selected from a total of 336 operating school districts in 1968-69. Although Washington has a large number of elementary school districts, the districts selected for this study were confined to "unified" school districts -- those including grades K or 1 through 12.

[6] The data were also analyzed on the basis of all three cities being treated as central cities. The results indicated no difference in the pattern of expenditures under either approach to the analysis.

All school districts in Washington State are fiscally independent, that is, they have their own taxing authority and the school budget is separate from the municipal or county budget.

PART I

INTER-DISTRICT REVENUE COMPARISONS

I. REVENUE SOURCES AND THEIR IMPACT ON DISPARITIES

The disparities in total per pupil revenues among districts of Washington State are the third lowest among states in this study. Only North Carolina and New Hampshire have less disparities in total revenues.[7/]

Specific factors contributing to per pupil revenue disparities are discussed in the following sections. As in other states examined in this study, the difference in amounts of locally raised funds is the primary factor contributing to disparities among districts, with state revenues lessening the disparities considerably.

An examination of the disparities by type of district indicates that the State of Washington deviates from the pattern found in other states where the range in disparities is greatest among suburban districts. In this state, disparities in revenues per pupil are greater among the rural districts.

Local Revenues. Local funds provide only 38 percent of revenues for education support in Washington, a lower share than in other states of the study, with the exception of North Carolina and Delaware. Seattle raises $444 per pupil locally, which is 50.9 percent of its total revenues for education. The suburbs of Washington raise only $341, or 43 percent of all

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[7/] The coefficient of variation is .12 for the State of Washington, .10 in North Carolina and .09 in New Hampshire.

revenues for education. There is a substantial range among suburban districts in local revenues, from Renton which provides $453 to Bethel, which only raises $163 per pupil. In the smaller cities, the average local revenues amount to $264, 34.2 percent of total school support. Finally, rural areas contribute an average of $216, which provides only 30 percent of their revenues for education, with most of the balance being derived from state sources.

State Revenues. The average amount of state aid is $432 per pupil, amounting to 56.5 percent of all revenues received by the districts in the sample. This amount excludes an average of $29 per pupil paid by the state to the retirement fund, since the data were not in a form which permitted allocation to individual school districts.[8]

State aid to Seattle totals $375 per pupil, of which 70.1 percent is regular K-12 state aid, 7.4 percent is aid to the handicapped, and the balance consists of other state programs. State revenues account for 43 percent of all revenues received by the city. The suburbs receive $425 per pupil, considerably more state aid than Seattle. Regular K-12 aid comprises 79 percent of state aid to suburbs, indicating that special state programs are a less significant component in these districts than in Seattle. The variance in state aid among suburbs is exceptionally low.[9]

Smaller cities receive an average of $448 per pupil, with Tacoma receiving $511 and Spokane $440. Tacoma receives $51 in aid to the handicapped, more than Seattle or any other city in the state. The lowest amount of state funds to any of the smaller city districts is $380.

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[8] The inclusion of the state pension fund increases the state contribution to 60.1 percent of total education revenues in the sample districts.

[9] Coefficient of variation is .08.

Rural districts receive $447 per pupil, about the same level of funding as smaller cities. Of this, over 80 percent is regular K-12 aid. This indicates that rural areas receive less special program aid from the state compared to urban areas, but more general aid.

Federal Revenues. Federal aid to Washington State totals $44 per student, or 5.6 percent of revenues from all sources. The cities (central and smaller) receive more federal aid than the other types of districts. Seattle receives $54, while the average federal payment to smaller cities is $51. Among these cities, the highest amount, $68,is received by Tacoma. As in other states, suburbs receive the least federal funding, averaging only $21. Rural areas receive $31 per student. Washington is the only state of those studied where federal aid is not equalizing, since a number of districts, such as Tacoma, with high total revenues, are also recipients of a large amount of federal aid.

Impact of All Revenue Sources on Disparities. The primary factor contributing to disparities in the per pupil revenues among Washington school districts is the differing amounts of local revenues raised. State revenues, in part because they provide more than half of all education revenues, reduce the disparities considerably.10/ There is a strong negative correlation between state and local revenue.11/ This indicates that state aid is going to districts which provide the least local revenue.

10/The coefficient of variation in local revenues is .32, but drops to .11 with the introduction of state funds.

11/r = -.50.

The guarantee feature of the foundation program provides more state aid where the tax revenues on local property values are low. Thus, Seattle, with its higher property values, receives the least state general aid, while the rural districts with low values receive the most.

II. FISCAL CHARACTERISTICS OF SCHOOL DISTRICTS

A. Property Values, Property Taxes, and Income

Per Pupil Property Values and Taxes. The central city of Seattle has almost the highest per pupil property base of any city of the eight states studied -- over $64,000.[12/] As a result of this high property base, the effective school property tax rate in Seattle is only $0.62. Among the smaller cities, both Tacoma and Spokane have property values above the state average. The effective property tax in Spokane is $0.88, above the state average of $0.68.

There is a considerable range in property values among suburban districts, from a high of $83,700 in Renton to a low of $17,800 in Bethel. However, both communities have similar property tax rates, below $0.60. In contrast, four other suburban communities tax themselves above $1.00. Rural districts, which show considerable differences in property values, have an average tax rate of $0.53, slightly below the state average.

Per Capita and Per Pupil Income. The range in per capita income among the districts in the State of Washington, with an average of $2,575, is low relative to most other states.[13/] Not unexpectedly, there

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[12/] The city with the highest per pupil property wealth is San Francisco.

[13/] The coefficient of variation is 0.20.

is a high correlation between total expenditures for education and per capita income.[14/]

Per capita income in Seattle is $3,035, the only central city in the states studied which exceeds the per capita income of the suburbs. The suburban per capita average is $2,875, ranging from $2,086 in Bethel to $4,236 in Mercer Island. Smaller city per capita income averages $2,409, with little variation among the smaller city districts.[15/] Rural district average income is $2,249.

Per pupil income in Seattle is $12,020 and only $10,724 in suburbs. The variation in per pupil income, as in other states, exceeds the variation in per capita income.[16/]

B. State and Local Taxes for Education

State Taxes. The primary source for state revenues for public elementary and secondary education in 1968-69 was the general fund, of which 38.9 percent was allocated for education. In addition, the state collected a statewide property tax of four mills, which was returned to the school districts from which it had been collected. Thus the state acted only as an agency for the collection of local property taxes rather than bringing about any redistribution of revenues among the districts.

Washington is one of the few states which has neither a personal nor a corporate income tax. As a result, the state has to depend pri-

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[14/] r = .93.

[15/] v = .14.

[16/] v = .26 compared to .20.

marily on a very broad-based sales and use tax, which involves both purchases by business and households, including most services. Other state tax sources include taxes on tobacco, alcoholic beverages, and on insurance companies, as well as inheritance and gift taxes. The resulting state tax structure is regressive, with state taxes for education as a percent of income varying from 3.1 percent for urban households earning between $2,000 and $2,999, 2.4 percent for households in the $7,500 to $7,999 income group, and 1.5 percent for households earning $15,000 and over.

Local Taxes. Local property taxes include both real and personal property. Personal property amounts to 31.4 percent of the property base, the second highest percentage of any state included in this study.[17] Therefore, property taxes computed for this study, as they include only taxes paid directly by households, are understated.[18] Because of the relatively high state payment for education, residential real property taxes are 3.4 percent for low income households, and 1.0 percent for households earning over $15,000.

Combined State/Local Tax Burden. In contrast to the other two high state aid states in this study (North Carolina and Delaware), Washington's overall state tax structure for education is regressive, ranging from 6.5 percent to 2.5 percent.

It should be noted that high state payments for education, even if the state tax structure is regressive, results in income redistribution from more to less affluent (in terms of income) school districts. Thus,

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17/ In Washington, 82 percent of personal property is industrial and commercial goods and 10 percent is agricultural goods.

18/ An analysis of the inclusion of taxes on industrial and commercial real and personal property was undertaken to determine the impact on the tax burden for the support of education. It was found that the inclusion of these taxes increased the burden for the $2,000 to $2,999 income group from 5.1 percent to 5.3 percent in urban areas. For households over $15,000, the total tax burden increases from 1.0 percent to 1.4 percent. As a result, total burden is increased, but the local taxes are slightly less regressive.

the more affluent areas of the state are paying more in state taxes than they receive in state revenues for schools. Therefore, total tax rates for education would be higher in lower income schools districts if the state share of education revenues were reduced and had to be replaced with local revenues. The state tax structure is considerably less regressive than the local property tax in the State of Washington.

III. STUDENT CHARACTERISTICS

The State of Washington has the second lowest percentage of minority students among the states included in this study -- 6.5 percent.[19] Blacks comprise 2.8 percent of enrollment, Spanish-surnamed students (primarily concentrated in the rural areas) comprise 1.5 percent, and Orientals 1.4 percent. (The remaining minority enrollment consists of American Indian students -- 0.8 percent.) Eighteen percent of Seattle' enrollment is minority (11 percent black). In contrast, in no suburban district does black enrollment exceed 0.7 percent. In a number of rural districts, such as Wepato, non-black minority enrollment is very high, while it is almost non-existent in other rural communities.[20]

Seattle has 6,654 disadvantaged or migrant students, about 8 percent of the city's total enrollment. In the suburbs, this group amounts to less than 3 percent of enrollment, while in rural areas it comprises about 6 percent of enrollment. Thus, Seattle, despite considerable property and income wealth, also contains one of the highest proportions of dis-

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19/ New Hampshire is the only state with lower minority enrollment -- 0.8 percent for sample districts, 0.6 for the total state.

20/ With the exception of Seattle, the number of minority teachers in the state is negligible -- 2.4 percent of all teachers -- compared to the total minority enrollment of 6.5 percent. As in other states (with the exception of North Carolina), most minority teachers are concentrated in central cities, the fewest in rural districts.

advantaged students in the state.

Reflecting the fact of low minority enrollment, Title I expenditures average only $11 per pupil. Title I expenditures in the central city of Seattle, reflecting the trend found in the other states studied, are somewhat above the rural mean. However, the rural districts of Wepato and Toppenish receive over $70 in Title I aid.

PART II

INTER-DISTRICT EXPENDITURE COMPARISONS

I. EXPENDITURE DIFFERENTIALS

The range in disparities in total per pupil expenditures for Washington State is low.[21/] Unlike other states examined in this study, the differences in expenditures among suburbs are exceptionally low, below the level of smaller cities or rural districts.

Differences in instructional costs are the primary cause for disparities in per pupil spending among types of districts. Non-instructional costs do not contribute to differences, as their level does not deviate substantially among districts. A detailed discussion of the expenditure pattern among types of districts and selected individual school districts follows. Table W-1 also provides a more comprehensive picture of expenditure differentials by function.

Since teacher expenditures account for a major part of expenditure differentials between districts, Section II examines a number of aspects which influence teacher expenditures: pupil-teacher ratios, education, experience, the relationship between education and experience by type of district, and starting as well as average salaries for teachers.

Total Current Operating Expenditures. Operating expenditures for

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[21/] The coefficient of variation is .12.

TABLE W-1

WASHINGTON - EXPENDITURES BY FUNCTION (1968-1969)

	Central Cities		Suburban		Smaller Cities		Rural		Statewide Average	
	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent
Total Instructional	$614	74.6%	$555	72.5%	$542	74.4%	$492	73.2%	$544	73.7%
Principals & Supervisors	35	4.2	34	4.4	34	4.7	33	4.9	34	4.6
Teachers	446	54.2	401	52.4	404	55.5	363	54.0	400	54.2
Other Instructional Personnel	44	5.4	43	5.6	44	6.0	35	5.2	41	5.6
Other Instructional Expenditures[1]	89	10.8	77	10.1	60	8.2	61	9.1	69	9.3
Total Non-Instructional	159	19.3	169	22.1	147	20.2	150	22.3	155	21.0
Administration	25	3.0	26	3.4	20	2.8	21	3.1	22	3.0
Transportation	10	1.2	31	4.1	18	2.4	35	5.2	24	3.2
Plant Operation	76	9.3	74	9.7	70	9.6	61	9.1	70	9.5
Plant Maintenance	33	4.0	21	2.7	24	3.3	19	2.8	24	3.3
Other Non-Instructional	15	1.8	17	2.2	15	2.1	14	2.1	15	2.0
Total Instructional & Non-Instructional	773	93.9	724	94.6	689	94.6	642	95.5	699	94.7
Total Fixed Charges & Other Miscellaneous Services[2]	50	6.1	41	5.4	39	5.4	30	4.5	39	5.3
Total COE	$823	100.0%	$765	100.0%	$728	100.0%	$672	100.0%	$738	100.0%

[1] Includes clerical staff, supplies, textbooks, library

[2] Excludes $29 per pupil paid by the state for teacher benefits, which cannot be allocated by school district. This item increases average state per pupil expenditures to $767.

the State of Washington average $738 per pupil.[22] The central city of Seattle spends $823, considerably above the suburban average of $765. Among the smaller cities with a population of over 100,000, Tacoma spends $891, over 20 percent more than the average district in the Washington sample, and Spokane $747. The average for smaller city districts is $728 per pupil, that for rural districts is $672. This distribution of expenditures by type of district follows the pattern discerned in other states in the study.

The range in disparities in per pupil expenditures among suburban districts in Washington, in contrast to all other states studied, is very low. The smaller cities of the state, as well as the rural districts, also show only minor differences in expenditures. Furthermore, despite the typical urban-rural expenditure differential, the range in disparities for the state as a whole is quite low.[23]

Instructional Expenditures. The cost of instruction accounts for 74 percent of all current operating expenditures in the state, close to the average of all the states in the study. Teacher salaries account for 54 percent of total current operating expenditures, and other instructional personnel, as well as principals and supervisors, account for an additional 11 percent.[24] Expenditures for teachers vary considerably between types of districts. They are highest in the central city (Seattle), and progressively lower in suburban areas, smaller cities,[25] and rural areas.

22/ This value excludes the state's payment to the pension plan of $29 per pupil.

23/ The coefficient of variation is 0.12, making Washington one of the states with relatively low expenditure disparities of the six states included in this aspect of the study.

24/ The remaining 9 percent of instructional costs, of course, is accounted for by such non-salary costs as texts and teaching supplies.

25/ However, Tacoma, for purposes of this analysis classed as a smaller city, has the highest expenditures of any district in the state sample.

Most of the difference between the central district, smaller cities and rural areas is explained by differences in teacher expenditures. Expenditures for principals and supervisors are relatively constant, but other instructional items (such as clerical personnel, supplies, textbooks) are higher in the large cities and suburbs compared to the balance of the state. Other expenditure items, such as fixed charges, average $39 for all districts in the sample, 5.3 percent of all current operating expenditures.[26]

II. EFFECT OF TEACHER CHARACTERISTICS ON EXPENDITURE DIFFERENTIALS

Salaries for begining teachers with a bachelor's degree and no experience differ little among districts in the State of Washington. The starting salary in Seattle is $6,175. Suburban districts have starting salaries averaging $5,995. Among smaller cities, the average is $6,013, and in Spokane, it is $6,206. The starting salaries in rural areas are $5,914, or somewhat below the state average.

Average teacher salaries[27] are the highest in Seattle, where classroom teachers receive over $9,100, above the suburban average of $8,538. Smaller city salaries are somewhat below the suburban level, and are lowest in rural areas, with an average of $8,133. As in most states, there is considerable difference between the average salaries for elementary and secondary school teachers. For example, the average Seattle elementary grade teacher receives $8,896, almost $1,000 below high school teachers.

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[26] The percentages exclude the $29 per pupil payment by the state to the retirement fund. Including this amount increases fixed costs to $68 per pupil.

[27] Average teacher salaries are obtained by dividing total expenditures for classroom teachers (excluding employee benefits) by the number of classroom teachers.

Pupil-teacher ratios in the various types of school districts show little difference, although Tacoma and a few affluent suburban communities such as Mercer Island have lower ratios than the state as a whole. In view of the uniformity in pupil-teacher ratios, all teacher expenditure differentials are due to differences in starting salaries, educational level and years of experience. Analysis indicates that districts with higher local revenues utilize these funds largely to increase the salaries of existing teacher positions, rather than to reduce class size.[28/] Combined education and experience levels are highest in the large cities while these are lowest in both suburban and rural areas.

An analysis of all personnel records to determine education and experience of Washington teachers by district, as shown in Table W-2, shows relatively little difference in Washington by type of school district in education levels of teachers, but some differences in average experience. In Seattle, 19.9 percent of all teachers have advanced degrees, above the suburban level of 15.2 percent, but slightly below the 20.4 percent level of smaller cities. Surprisingly, 13.1 percent of rural teachers have advanced degrees, only slightly below the suburban average.

Teachers with advanced degrees consistently have more years of experience than teachers with only a bachelor's degree. However, teachers with no degrees have the highest experience levels, as no doubt they entered the school system when requirements for certification were lower.

[28/] There is a high positive correlation between average teacher salaries and local revenues -- r = 0.45

TABLE V-2

EDUCATION AND EXPERIENCE BY TYPE OF DISTRICTS
STATE OF WASHINGTON
(1968 - 1969)

Degree	Central City		Suburban		Smaller Cities		Rural		STATE TOTAL	
	Per-Cent	Average Exper-ience	Per-Cent	Average Exper-ience	Per-Cent	Average Exper-ience	Per-Cent	Average Exper-ience	Per-Cent	Average Exper-ience
No Degree	1.2%	11.6 yrs.	1.0%	9.5 yrs.	2.0%	11.0 yrs.	1.9%	10.0 yrs.	1.4%	10.5 yrs.
B.A.	78.9	8.2	83.8	6.3	77.6	7.6	85.0	6.9	81.4	7.2
M.A.	19.8	9.7	15.2	8.3	20.4	9.6	13.1	9.0	17.1	9.2
Ph. D.	0.1	9.4	*	6.8	*	13.5	*	6.5	0.1	8.6
ALL DEGREES	100.0%	8.5 yrs.	100.0%	6.8 yrs.	100.0%	8.0 yrs.	100.0%	7.2 yrs.	100.0%	7.5 yrs.

* Less than .05 percent.

In terms of average years of experience, Seattle teachers average 8.5 years, suburban districts, 6.8 years. Seattle's higher average teacher salaries relative to suburbs reflect three things -- higher proportions of advanced degrees, more experience, and higher starting salaries. Teachers in other cities of the state average 8 years of experience, while rural teachers average 7.2 years of experience. Rural expenditures per teacher are lower than the state average because of three factors: lower salaries for comparable education and experience, slightly lower average experience, and fewer advanced degrees.

SUMMARY

The amount of state aid provided by Washington to school districts (during 1968-1969) is considerably above the national average. This is no doubt a major factor in low overall revenue disparities relative to all but two other states examined. While state aid has a strong equalizing impact on disparities caused by differences in local revenue, federal funds do not have such an equalizing effect. An additional likely factor for low revenue disparities is that per capita income differentials between districts are not substantial. In contrast to other states examined, the largest city, Seattle, has a per capita income higher than its suburban school districts. In addition, per pupil property wealth in Seattle is one of the highest among large cities in the states studied.

Unlike other high state aid states, Washington has neither a personal nor a corporate income tax, thus depending on broad-based sales, use, and excise taxes to fund education and other public services. As a result, the overall state structure is regressive. Local taxes for education depend on both real and personal property. The personal property is levied primarily on industrial and commercial enterprises.

Operating expenditures in Seattle are sharply above the suburban average. However, suburbs of Seattle, unlike other states, show little per pupil expenditure differentials. Most of the differences in expenditures between types of districts are due to difference in the expenditures for teachers, primarily their average salaries, since pupil-teacher ratios show little variation. The average education level of teachers shows little difference among types of districts. Teachers with higher levels of education, as in most states, consistently have more years of experience than teachers with only bachelor's degrees.

WASHINGTON
SAMPLE DISTRICTS
(1968 - 1969)

DISTRICT	COUNTY
Central City	
Seattle	King Pierce
Suburban	
Auburn	King
Bellevue	King
Federal Way	King
Highline	King
Issaquah	King
Kent	King
Lake Washington	King
Mercer Island	King
Northshore	King
Renton	King
Shoreline	King
Bethel	Pierce
Cities Over 10,000	
Arberdeen	Grays Harbor
Battle Ground	Clark
Bellingham	Whatcom
Bremerton	Kitsap
Everett	Snohomish
Evergreen	Clark
Hoquiam	Grays Harbor
Kennewick	Benton
Longview	Cowlitz
Moses Lake	Grant
North Thurston (Olympia)	Thurston
Pasco	Franklin
Port Angeles	Clallam
Pullman	Whitman
Richland	Benton
Vancouver	Clark
Walla Walla	Walla Walla
Wenatchee	Chelan
Yakima	Yakima
Tacoma	Pierce
Spokane	Spokane
Clover Park	Pierce
Puyallup	Pierce

Cities Over 10,000	COUNTY
Sumner	Pierce
University Place	Pierce
Central Valley	Spokane
West Valley	Spokane
Rural Areas	
Anacortes	Skagit
Arlington	Snohomish
Blaine	Whatcom
Burlington	Skagit
Centralia	Lewis
Chehalis	Lewis
Cheney	Spokane
Clarkston	Asotin
Colfax	Whitman
Deer Park	Spokane
Eastmont	Douglas
Edmonds	Snohomish
Ellensburg	Kittitas
Enumclaw	King
Franklin Pierce	Pierce
Grandview	Yakima
Kelso	Cowlitz
Lower Snoqualmie Valley	King
Lynden	Whatcom
Marysville	Snohomish
Mead	Spokane
Monroe	Snohomish
Mount Vernon	Skagit
Mukilteo	Snohomish
Naches Valley	Yakima
North Kitsap	Kitsap
Oak Harbor	Island
Othello	Adams
Peninsula	Pierce
Sedro-Wooley	Skagit
Snohomish	Snohomish
South Central	King
South Kitsap	Kitsap
Sunnyside	Yakima
Toppenish	Yakima
Wepato	Yakima
West Valley	Yakima
Central Kitsap	Kitsap
White River	Pierce

STATE OF WASHINGTON

DATA SOURCES

A major portion of the data for these analyses came from unpublished sources furnished by various state agencies and from computer tapes furnished the Urban Institute by the Washington Department of Public Instruction. The following is a partial list of published sources also drawn upon for this study:

Berney, Robert E., et al. Tax Structure Variations in the State of Washington. Pullman, Washington: Washington State University Press, 1970.

Temporary Special Levy Study Commission. Research Reports. 2 Vols. Olympia: Washington State Legislature, March, 1971.

Washington Education Association, Research Department. 1968-69 Teachers' Salary Schedules: First Class Districts. Seattle: WEA, August, 1968.

__________, Research Department. 1968-69 Teachers' Salary Schedules: Second-Class Districts. Seattle: WEA, November, 1968.

__________, Research Department. WEA's Forty-Sixth Annual Certificated Staff Salary Study, 1968-69. Seattle: WEA, 1969.

Washington State Department of Public Instruction, Office of Information. Urban, Racial, Disadvantaged Educational Programs. Report to the Legislature. Olympia: State of Washington, January, 1970.

__________, Office of the Superintendent. Forty-Ninth Biennial Report for the Period July 1, 1966 to June 30, 1968. Olympia: State of Washington, November, 1968.

Washington State Department of Revenue, Research and Information Division. 1969 Annual Report. Olympia: State of Washington.

__________. First Biennial Report and 1968 Annual Report of the Department of Revenue. Olympia: State of Washington.

__________. Property Revaluation 1970. Olympia: State of Washington, December, 1970.

______________. *Property Tax Levy and Collection Statistics, 1969*. Olympia: State of Washington, April, 1970.

______________. *Second Biennial Report, 1970*. Olympia: State of Washington.

______________. *Washington's Tax System: A Comparison, Fiscal Year 1968*. Olympia: State of Washington.

Washington State Office Program Planning and Fiscal Management. *Financial Report: All Budgeted Funds Statement of Operations, 1967-1969, Biennium End Report*. Report No. 25. Olympia: State of Washington.

MODERATE STATE AID STATES

STATE OF CALIFORNIA
(1968-1969)

INTRODUCTION

California's system of financing its public schools is based on a combination of local school district property tax revenues, and general state aid distributed on the basis of a combination foundation program and a per pupil flat grant (or "basic aid," as it is termed in that state). In the sample districts studied, for the year 1968-69, local revenues amounted to 61.3 percent of non-federal education aid and state revenues 38.7 percent. Total education revenues were distributed as follows: 57.4 percent local, 36.2 percent state and 6.4 percent federal.[1] The foundation program guarantees a minimum level of expenditure per pupil to each district -- provided the district levies a specified minimum tax rate -- the state paying the difference (if any) between the guaranteed level of expenditure and the amount raised locally through the required minimum tax rate. The amount of state revenue distributed as basic aid amounts to a higher proportion of total state aid than that distributed via the foundation program. It should be noted that basic aid is included in calculating the amount a district receives under the foundation program.

There is also a program of "supplementary aid," a relatively small program for districts of low property wealth which tax themselves at a rate higher than the required minimum.

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[1] These percentages refer to current operating expenditures only. Capital outlay has been excluded from this analysis. The state share also excludes $18 per pupil contributed by the state to the retirement fund.

In addition to the general aid programs, which comprise almost 82 percent of total state aid, there is a broad range of state categorical programs.[2]

California's school districts, which are all fiscally independent, are of three types -- elementary, high school, and unified (K through 12). For this study, only unified districts were selected, grouped as follows:

Type of District	No. of Districts	Average ADA
Central Cities	5	204,751
Suburbs	55	14,068
Smaller Cities	48	16,981
Rural Areas	38	4,113
ALL DISTRICTS	146[3]	18,964

The sample districts include approximately 2.78 million students -- 94 percent of all ADA in unified districts and 66 percent of the total state ADA.

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[2] These include funds for transportation, aid for exceptional children, and a compensatory education program.

[3] In 1968-69, there were 235 unified school districts. The total number of operating districts was 1,094 (excluding junior colleges).

PART I

INTER-DISTRICT REVENUE COMPARISONS

I. REVENUE SOURCES AND THEIR IMPACT ON DISPARITIES

California ranks third highest among the eight states in this study in terms of the disparities among districts in total per pupil revenues.[4/] (See Table II-3 .) The factors which contribute to these disparities are discussed below. The primary factor is the disparities in local revenues.[5/] State revenues tend to reduce the disparities somewhat and the addition of federal funds, to a minor extent, decreases the disparities still further.

As in the other states in this study, the differences among suburban school districts in per pupil expenditures are greater than that in any of the other types of school districts.

Local Revenues. Local revenues in the sample districts provide an average of $417 per pupil,or 57.3 percent of all school funds. In the five largest cities, local revenues average $462 per pupil, while their suburbs average $421. If all cities over 100,000 in population are included in the analysis, local revenues drop to $444, indicating that the five largest cities raise more local revenues.

[4/] The coefficient of variation for total per pupil revenues is .14. (By way of comparison, the lowest coefficient of variation is .09, for the state of New Hampshire, and the highest is .16, for the state of Colorado.)

[5/] The coefficient of variation in local revenues is .32, approximately the same as that found in New York and Michigan, the other two moderate aid states.

Suburban jurisdictions show the highest local revenue variation of any of the categories of districts.[6] This follows the pattern of other states. Local revenues in the large cities are highest in San Francisco, $650, and lowest in San Diego, $324. Among the suburbs, Beverly Hills raises $1,073 per pupil from local resources, while at the other extreme, Baldwin Park raises only $190. There are other suburban districts such as Charter Oaks, Glendora and West Covina which also raise less than $300 from local sources. This accounts for the large coefficient of variation among suburban districts.

State Revenues. In California, central cities with a population of 250,000 or more receive the smallest share of state aid -- an average of $228 per pupil -- compared to $274 received by suburbs, $294 by the smaller cities, and $281 by rural districts. State aid provides only 31 percent of all revenues for education in central cities. In fact, of the central cities in the eight states included in the revenue analysis, New Hampshire is the only state whose central city (Manchester) receives a lower percentage of state aid

With the exception of the central cities, the above figures indicate that state aid in California is fairly equally distributed among the various categories of districts. The cause for the disparities in state aid between the central cities and the balance of the state appears to be property wealth differences; that is, since central cities have the highest per pupil property values, they receive the least state aid. State funds among central cities range from $200 per pupil in San Francisco (76.6 percent below the state average) to $300 in San Diego (14.9 percent above the state average). In terms of per pupil property wealth, San Francisco is almost twice the state average, San Diego below the average.

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[6] $v = .44$ in the suburbs and .18 in the five big cities.

Central cities have higher total per pupil revenues than suburbs for two reasons: they receive $30 per pupil more in federal aid and raise $41 more per pupil locally. This $71 more than offsets the lower amount of state aid received by central cities -- $46 per pupil less than what suburbs receive.

Among suburban districts, the state contributes 38.0 percent of all revenues. Beverly Hills receives only $141 from the state, which is 53.6 percent of the state average and the least state aid of any of the suburban districts, while Baldwin Park receives $384, which is nearly 50 percent above the state average.[7/] Of all suburban districts in the sample, 39 receive state aid above the state average; 27 below the average. The disparities in state aid are greater among suburbs than among other types of districts. With only two exceptions, among suburban districts, wherever revenues raised locally are above the average, state aid is below the state average. The general pattern appears to be that the more affluent districts receive relatively low state aid (half to two-thirds of the state average), but the amount these districts raise locally more than offsets the reduced state aid. Rural areas receive only 38.2 percent of their revenues from the state, about the same as suburban areas. It is somewhat surprising that both suburban and rural areas receive approximately the same level of state aid (both dollars in and percent of total revenues), although average

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[7/] Baldwin Park receives the second highest amount of state aid among the suburban districts in the sample. Bassett receives $392 per pupil.

property values in suburbs are 12.9 percent higher than those in rural areas.

Federal Revenues. Although federal funds contribute only a small percentage of total revenues, their impact in some communities (particularly those receiving PL-874 -- federally impacted areas aid) can be substantial. Federal aid is above the state average in three of the five largest central cities -- in San Diego, because of the large amount of aid received under the federally impacted areas program, and in San Francisco and Oakland because of large amounts of Title I funds for children from low income families or families on welfare.

Among all suburban districts, only eight receive federal funds above the federal average for the State of California and most of these districts are located near federal facilities. Federal funds comprise only 3.5 percent of all suburban district education revenue. Beverly Hills receives almost as much federal aid (about $24 per student) as the average suburban district. These funds were largely for ESEA Title III programs.[8] Palo Alto receives about the same amount of federal funds, $8 of which is for federally impacted areas aid. In fact, these two communities receive only $14 less per student in federal funds than Baldwin Park, which, in addition to being a district with low property values, is a community with a fairly high proportion of minority and Title I children.

Even in rural areas of California, federal funds are not particularly significant, accounting for only 8.9 percent of all education expenditures in those districts. However, two rural districts receive a large amount of federal aid: Travis (the location of an air base) receives $313 per pupil in impacted areas aid, and the Muroc school district receives $262 from this same program.

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[8] Title III grants are primarily for the establishment of supplementary educational centers for "the development and establishment of exemplary elementary and secondary school educational programs to serve as models for regular school programs." Beverly Hills' grant was for the development of audio-visual systems.

Impact of All Revenue Sources on Disparities. If only local revenues are considered, the disparities are quite high.[9] The addition of state revenues reduces this high disparity level considerably, demonstrating the equalizing impact of state funds. The inclusion of federal funds reduces disparities still further, though only slightly.[10]

II. FISCAL CHARACTERISTICS OF SCHOOL DISTRICTS

A. Per Pupil Property Values and Taxes

Per Pupil Property Values. California's average per pupil property wealth (87 percent of which is real property and 13 percent personal property) exceeds that of all of the states in the study. The five largest cities of California have the highest property wealth in the state, averaging $56,428. San Francisco, with $90,573, per pupil, leads these cities with a property base almost three times the level of San Diego.[11]

The suburban districts show dramatic differences in property wealth: the list is headed by Beverly Hills, with an almost incredible $200,000 per pupil property base, followed by El Segundo with over $150,000. A number of districts, such as Santa Monica, Palo Alto, and Burbank, exceed

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[9] v = .33.

[10] v = .15 and .14, respectively.

[11] In San Francisco, 43.5 percent of all real property is commercial-industrial, compared with 22.6 percent in San Diego.

$70,000. At the other end of the spectrum, Baldwin Park has a per pupil property value of approximately $16,000 and Charter Oaks somewhat above $17,000. The average for all suburbs is $43,650.[12/]

Smaller cities of California also vary sharply in property wealth, with a range of from under $20,000 per student to $148,258 per student in Palm Springs. Rural areas range from under $10,000 to over $100,000 per student.

Property Tax Rates. Effective tax rates for education in the central cities are below the level of other urban districts in the state, and only slightly above the rural level. Among the five largest cities, San Francisco's tax rate of $0.61 per $100 market value[13/] is the lowest, Oakland's rate of $1.37 the highest. Suburban districts and smaller cities in California both have average effective tax rates of $1.22. Beverly Hills, Santa Monica, and Burbank, with their very high property values, have below average property tax rates ranging from $0.63 to $0.90, while Baldwin Park, which is low in property wealth, has a tax rate considerably above the average at $1.48. However, Palo Alto, despite its high per pupil property value, has the second highest property tax in the state -- $1.73. Only Berkeley, which also has above average property value, tops the Palo Alto rate among all sample districts in the state, with $1.92 per $100 market value. This follows the national trend that university communities, generally affluent, tax themselves considerably above the average for their property base in order to raise additional local funds for education.

[12/] The coefficient of variation for suburban property wealth is .57.

[13/] Corrected to exclude additional taxes which support junior colleges.

An analysis of the state constitutional and legal restrictions on the taxing powers of local school districts indicates that while there are no constitutional restrictions, there are a number of statutory limitations. The legislature has exempted intangible property completely from taxation and has placed maximum limits on the property tax rates for school purposes. However, these limits may be overridden by a majority of the local school district voters. There are also numerous special purpose "permissive overrides," which are not subject to voter approval.

B. State and Local Taxes for Education

State Taxes. The State of California allocates 39.4 percent of state tax revenue from its general fund to elementary and secondary education. Major tax revenue sources are the personal and corporate income tax, as well as sales and excise taxes.[14] The overall state tax structure is progressive, due largely to the personal income tax. The effective rate for those earning above $15,000 is 2.1 percent of income, more than offsetting the generally regressive nature of the other state taxes comprising the general fund. A household earning between $2,000 and $2,999 pays 1.1 percent of its income for state taxes allocated for education, compared to 1.2 percent for those earning between $7,500 and $9,999, and 2.1 percent for households earning over $15,000. For rural households, state taxes as a percent of income are slightly lower for all income groups except for families earning over $15,000.

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[14] A study, undertaken specifically for this report, of the constitutional and legal constraints associated with state taxes which might limit their flexibility in providing additional revenues for education, indicates that there are no significant constitutional restrictions on the state's taxing power. (The only exception is that fuel and motor vehicle taxes are earmarked for highway purposes.)

Local Taxes. Local property taxes are regressive and are slightly higher in urban areas relative to rural areas, because of differences in effective tax rates. For urban area homeowners, these taxes range from 6.9 percent of income for those earning between $2,000 and $2,999 to 1.6 percent for households earning over $15,000. (These percentages exclude the impact of the tax on personal property.)

Combined State/Local Tax Burden. The combined tax burden (what state residents pay as a proportion of their income for elementary and secondary education via both the state and local taxes) for urban areas is regressive for income levels up to $15,000, with 8.0 percent for households earning between $2,000 and $2,999 to 3.5 percent for households earning between $10,000 and $14,999. Families earning over $15,000 pay 3.7 percent of their income for education.

III. STUDENT CHARACTERISTICS

In California, 29.3 percent of the total enrollment is comprised of minority students.[15/] This is only slightly below the 33 percent minority enrollment in North Carolina, the highest proportion of any of the states included in this study. The composition of minority groups in California differs from southern, eastern or mid-western states in that 14.6 percent of all students are classified as "Spanish-surnamed," primarily of Mexican extraction.[16/] (Only 2.3 percent of all students in the California sample

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[15/] Minority teachers are concentrated in the five largest cities, where they comprise 18 percent of all teachers. Within these cities, the range is considerable -- from 27 percent in Oakland to only 6 percent in Long Beach. In other areas of the state, minority teachers comprise only about 6 percent of the instructional staff.

[16/] In New York State, 21.2 percent of all students are black, 12.6 percent are primarily of Puerto Rican extraction.

are Oriental). In central cities, somewhat over half the 43.9 percent minority enrollment is black while in the balance of the state, the opposite is the case.[17/] Only 3 percent of all suburban students are black but 13 percent are Spanish-surnamed. In rural areas, the contrast is even more dramatic -- blacks comprise less than 2 percent of enrollment, Spanish-surnamed almost 20 percent.

There is a strong correlation between the percent of black students and local revenues: the more blacks, the higher the local revenues per pupil. Consequently, there is a strong negative correlation between black enrollment and state aid.[18/] This can be explained by the fact that much of the property wealth is concentrated in large cities, which also have the highest percentage of black students. There is no significant correlation between state or local aid and Spanish-surnamed students. Total per pupil expenditures also correlate positively with black students, for the same reasons,[19/] while there is no relationship between total expenditures and Spanish-surnamed students. Many of the Spanish-surnamed students are located in agricultural areas of California.

ESEA Title I payments average $22 in central cities, $19 in rural areas, but only $8 in suburban school districts.

Reading achievement scores (Grade 3) are at approximately the same level in central cities and rural areas. The achievement levels of these two categories of school districts are below those of the suburbs or smaller cities. The suburban average reading achievement scores are high because of the influence of the substantially higher achievement levels in

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[17/] In rural areas, only 30 percent of minority enrollment is black.

[18/] r = .41.

[19/] r = .35.

such affluent communities as Beverly Hills and Palo Alto. In the case of the large central cities, the mean achievement levels at San Diego and Long Beach are above the state average, those of the other three cities somewhat below the state average. As is the case with other educational and fiscal characteristics, the disparities in average reading achievement levels among suburban districts are greater than the differences in other types of districts.

There is a negative correlation between percent minority and reading achievement scores in all grades. This negative correlation increases in higher grades -- following a national pattern which indicates that minority children fall increasingly behind as they continue into the higher grades.

PART II

INTER-DISTRICT EXPENDITURE COMPARISONS

I. EXPENDITURE DIFFERENTIALS

The differences among districts in total per pupil expenditures in California is greater than that in four of the six states included in this part of the analysis. As in the other states in this study, the differences in expenditures among suburban school districts is substantial, indicating that suburbs are far from homogeneous.

Instructional expenditures,[20] which amount to 75 percent of all current operating expenditures in California, account for 86 percent of the total differential in expenditures between central cities and rural areas. Non-instructional expenditures have almost no impact on the expenditure differentials among categories of school districts.

A more detailed discussion of the expenditure pattern is presented below. Table CAL-1 shows the total distribution pattern of expenditures by function for each category of district as well as for the state as a whole.

Teacher expenditure differentials, the major factor contributing to the total per pupil disparities in expenditures, are examined in Section II.

Total Current Operating Expenditures. Total current expenditures in

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[20] Excluding fixed costs such as local and state contributions to retirement funds and other benefits.

TABLE CAL-1

CALIFORNIA - EXPENDITURES BY FUNCTION
(1968-1969)

	Central Cities*		Suburban		Smaller Cities		Rural		Statewide Average	
	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent
Total Instructional	$561	74.8%	$532	75.0%	$529	75.6%	$506	73.6%	$541	75.0%
Principals & Supervisors	35	4.7	35	4.9	32	4.6	28	4.0	34	4.7
Teachers	427	56.9	400	56.4	402	57.4	390	56.7	410	56.9
Other Instructional Personnel	75	10.0	69	9.7	68	9.7	56	8.2	70	9.7
Other Instructional Expenditures	24	3.2	28	4.0	27	3.9	32	4.7	27	3.7
Total Non-Instructional	127	16.9	125	17.6	121	17.3	133	19.4	125	17.4
Administration	24	3.2	23	3.2	19	2.7	22	3.2	22	3.1
Transportation	7	.9	12	1.7	15	2.1	28	4.1	12	1.7
Plant Operation	54	7.2	58	8.2	57	8.2	55	8.0	56	7.8
Plant Maintenance	32	4.3	24	3.4	22	3.2	21	3.1	26	3.6
Other Non-Instructional	10	1.3	8	1.1	8	1.1	7	1.0	9	1.2
Total Instructional & Non-Instructional	688	91.7	657	92.6	650	92.9	639	93.0	666	92.4
Total Fixed Charges & Other Miscellaneous Services	62	8.3	52	7.4	50	7.1	48	7.0	55	7.6
Fixed Charges	42	5.6	38	5.4	39	5.6	40	5.8	40	5.6
Community Services & Other Costs	20	2.7	14	2.0	11	1.5	8	1.2	15	2.0
Total COE**	$750	100.0%	$709	100.0%	$700	100.0%	$687	100.0%	$721	100.0%

*Cities with population of 250,000 and over
**Excludes state contribution to retirement fund of $18 per pupil

the five largest cities of California average $750 per pupil, compared to $709 in suburban jurisdictions. Smaller California cities spend $700 per pupil, rural areas $687. Thus, the biggest expenditure differentials are between the large cities and the balance of the state. Among the city school districts, San Francisco shows the highest expenditures, $917 per pupil, while San Diego spends only $700. The differences in expenditures among suburban districts are substantial, ranging from $1,244 in Beverly Hills and $1,140 in Palo Alto to $581 in Garden Grove. Berkeley, a semi-urban university community, has the highest per pupil expenditure level among all sample districts in California ($1,248), although its property value is less than that of Beverly Hills.

Instructional Expenditures. Instructional expenditures total 75 percent of all current costs. These expenditures range from $561 per pupil in central cities to $506 in rural areas. Instructional functions, specifically teachers and other instructional personnel, account for almost all intra-state expenditure differentials. Classroom teacher salaries amount to 57 percent of all current expenditures, other instructional personnel an additional ten percent. Among the large cities of the state, San Francisco spends $547 per pupil for teachers, San Diego and Long Beach $408. The same pattern follows in suburban jurisdictions, with Beverly Hills spending $709 per pupil for teachers and Palo Alto $627, while Baldwin Park spends only $335 per pupil for this purpose. It is apparent that the affluent communities of California utilize their additional local revenues primarily to support their instructional staff.

Non-Instructional and Other Expenditures. Non-instructional expenditures show virtually no differences between central cities, suburbs, smaller cities, and rural areas, except that central cities have higher maintenance costs. While transportation costs are higher in rural districts (averaging $28), this is partially offset by the lower maintenance costs in these areas. Among the large cities, transportation costs average only $7 per pupil.

Fixed costs, comprised primarily of teacher benefits, average $40. These costs are understandably highest in San Francisco, Beverly Hills, Oakland and Berkeley, where instructional costs are considerably above average. Community services costs are high in the central cities and low in rural areas.

II. EFFECT OF TEACHER CHARACTERISTICS ON EXPENDITURE DIFFERENTIALS

The highest starting salaries -- $6,916 for a B.A. degree and no experience -- are paid in the five largest cities of California. Suburban jurisdictions pay $6,419, smaller cities $6,292, and rural districts $6,146. Average teacher salaries follow the same pattern -- the largest cities paying $10,166, suburbs $9,608, smaller cities, $9,551, and rural districts, $8,904. San Francisco pays the highest average salaries among the large cities, but these districts are considerably below the affluent suburban districts of Beverly Hills, Santa Monica, and Palo Alto in terms of average salaries.

Except for a few districts, little differences are found among the bulk of urban districts (city and suburban) in the percentage of teachers with advanced degrees.[21] However, as in other states, in the rural areas, a much smaller proportion of teachers have advanced degrees.

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[21] One exception to this trend is Palo Alto, where 46 percent of the teachers have advanced degrees. This is twice the urban average.

The experience level of teachers shows even less disparity among types of districts. Those teaching in central cities average 7.6 years experience, in suburban districts, 6.9 years, in smaller cities, 7.7 years, and in rural districts, 6.8 years. Central cities pay higher average salaries than suburbs as a result of two factors: the starting salaries average seven percent higher and there are proportionately more experienced teachers. The difference between urban and rural areas can be explained by an additional factor -- 40 percent more of urban teachers have advanced degrees.

In California, there is a high correlation between credits beyond a bachelor's degree earned and years of experience. In Los Angeles, for example, only 14.6 percent of all teachers have merely a bachelor's degree, and these average 3.8 years experience. In contrast, the 29 percent of all teachers in the city who have a B.A. plus 98 credits average 11.6 years teaching experience. Beverly Hills, Baldwin Park, and Palo Alto follow the same pattern -- teachers with only a bachelor's degree have four years experience, those with the highest number of additional credits beyond a bachelor's degree have over 11 years' experience.

There is, however, no direct relationship between advanced degrees and credits. Although 75 percent of all teachers in Los Angeles have accumulated over 42 credits (generally sufficient for an M.A.), only 23 percent of all teachers in the city have an advanced degree.

SUMMARY

The analysis of California has shown that there are considerable disparities in total revenues among school districts, due primarily to the impact of differences in local revenues raised. However, disparities in California are no higher than the average of other states examined in this study. Despite the fact that the state provides only a minimum level of funds to each district, state revenues have an overall equalizing effect.

Property wealth in California on a per pupil basis has been found to be higher than in other states examined. It is particularly high in the largest five cities, due in part to the concentration of commercial property, particularly in San Francisco. Suburban districts have dramatic differences in property wealth. However, many high property and high income districts (except the most affluent) tax themselves above the state average to provide their schools with sizable local revenues.

The overall state tax structure is found to be progressive. However, when the state share allocated for education is combined with the regressive local school taxes, the overall tax structure for elementary and secondary education is regressive.

California has a large share of minority students, the second highest of any state examined in this study. Black enrollment, as in most other states, is concentrated in the central cities. Since per pupil expenditures are also highest in these central cities, there is a positive correlation between black enrollment and expenditures. However, despite high expenditures, reading scores in cities with high minority enrollment tend to be below the state average. Affluent suburban school districts, which have high per pupil expenditures, have above average reading scores.

Most of the differentials found in expenditures between urban and rural areas are due to instructional expenditures, particularly salary expenditures for teachers.

CALIFORNIA
SAMPLE DISTRICTS
(1968 - 1969)

DISTRICT NAME	COUNTY
Central City	
San Diego	San Diego
San Francisco	San Francisco
Oakland	Alameda
Los Angeles	Los Angeles
Long Beach	
Suburban Areas	
Alameda	Alameda
Albany	Alameda
Fremont	Alameda
Piedmont	Alameda
ABC	Los Angeles
Arcadia	Los Angeles
Bassett	Los Angeles
Bellflower	Los Angeles
Beverly Hills	Los Angeles
Bonita	Los Angeles
Burbank	Los Angeles
Azusa	Los Angeles
Baldwin Park	Los Angeles
Charter Oak	Los Angeles
Claremont	Los Angeles
Covina	Los Angeles
Culver City	Los Angeles
Downey	Los Angeles
Duarte	Los Angeles
El Rancho	Los Angeles
El Segundo	Los Angeles
Glendale	Los Angeles
Glendora	Los Angeles
Inglewood	Los Angeles
La Canada	Los Angeles
Las Virgenes	Los Angeles
Lynwood	Los Angeles
Monrovia	Los Angeles
Montebello	Los Angeles
Norwalk-La Mirada	Los Angeles
Palos Verdes Penninsula	Los Angeles
Paramount	Los Angeles
Pasadena	Los Angeles

CALIFORNIA
SAMPLE DISTRICTS
(1968 - 1969)

DISTRICT NAME	COUNTY
Pomona	Los Angeles
San Marino	Los Angeles
Santa Monica	Los Angeles
South Pasadena	Los Angeles
Temple City	Los Angeles
Torrance	Los Angeles
West Covina	Los Angeles
Brea Olinda	Orange
Capistrano	Orange
Garden Grove	Orange
Orange	Orange
Placentia	Orange
Santa Anna	Orange
Coronado	San Diego
Poway	San Diego
Vista	San Diego
Palo Alto	Santa Clara
Santa Clara	Santa Clara
Simi Valley	Ventura
Castro Valley	Almeda
Martinez	Contra Costa
Berkeley	Almeda

Smaller Cities

Hayward	Alameda
Newark	Alameda
San Leandro	Alameda
San Lorenzo	Alameda
Chico	Butte
Antioch	Contra Costa
Pittsburg	Contra Costa
Richmond	Contra Costa
San Ramon Valley	Contra Costa
Madera	Madera
Novato	Marin
Monterey Penninsola	Monterey
Pacific Grove	Monterey
Napa Valley	Napa
Palm Springs	Riverside
Palos Verde	Riverside
Barstow	San Bernardino
Lodi	San Joaquin
Stockton	San Joaquin
San Luis Coastal	San Luis

CALIFORNIA
SAMPLE DISTRICTS
(1968 - 1969)

	COUNTY
South San Francisco	San Mateo
Lompoc	Santa Barbara
Pajaro Valley	Santa Cruz
Vacaville	Solano
Vallejo	Solano
Yuba City	Sutter
Visalia	Tulare
Ventura	Ventura
Woodland	Yolo
Mt. Diablo	Contra Costa
Fresno	Fresno
Riverside	Riverside
Sacramento	Sacramento
San Bernardino	San Bernardino
San Jose	Santa Clara
Banning	Riverside
Corona	Riverside
Hemet	Riverside
Jurupa	Riverside
Moreno	Riverside
Elk Grove	Sacramento
Folsom Cordova	Sacramento
San Juan	Sacramento
Chino	San Bernardino
Colton	San Bernardino
Fontana	San Bernardino
Redlands	San Bernardino
Rialto	San Bernardino
Rural Areas	
New Haven	Alameda
Oro Madre	Amador
Colusa	Colusa
Del Norte	El Dorado
Lake Tahoe	El Dorado
Clovis	Fresno
Kings Canyon	Fresno
Sanger	Fresno
Selma	Fresno
Willows	Glenn
Southern Humbolt	Humboldt
Calexico	Imperial
Muroc	Kern
Corcoran	Kings

CALIFORNIA
SAMPLE DISTRICTS
(1968 - 1969)

	COUNTY
Lakeport	Lake
Mariposa County	Mariposa
Ukiah	Mendocino
Los Banos	Merced
Modoc-Tulelake	Modoc
Western Placer	Placer
Plumas	Plumas
Alvord	Riverside
Desert Sands	Riverside
Morongo	San Bernadino
Yucaipa	San Bernardino
Lincoln	San Joaquin
Manteca	San Joaquin
Gilroy	Santa Clara
Morgan Hill	Santa Clara
Fall River	Shasta
Sierra-Plumas	Sierra
Travis	Solano
Sonoma Valley	Sonoma
Ceres	Stanislaus
Ojai	Ventura
Davis	Yolo
Washington	Yolo
Marysville	Yolo

STATE OF CALIFORNIA

DATA SOURCES

A major portion of the data for these analyses came from unpublished sources furnished by various state agencies. The following is a partial list of published sources also drawn upon for this study:

Barro, Stephen M. *Alternatives in California School Finance*. R-663-RC/CC. Santa Monica: Rand Corporation, May, 1971.

California Franchise Tax Board. *Annual Report 1969 Calendar Year*. Sacramento: State of California.

California Legislative - Executive Tax Study Group. *Preliminary Report*. Sacramento: State of California, November 14, 1969.

California Office of Administrative Procedure, Department of General Services. *California Administrative Code: Title 5. Education.* Sacramento: State of California.

California State Board of Equalization. *Annual Report, 1968-69*. Sacramento: State of California.

California State Contoller's Office. *Annual Report for the Fiscal Year Ended June 30, 1969*. Sacramento: State of California.

______________________. *Annual Report of Assessed Valuation and Tax Rates as of September 1969 of the Counties of California for FY 1969-70*. Sacramento: State of California.

______________________. *Annual Report of Financial Transactions Concerning Cities of California, FY 1968-69*. Sacramento: State of California.

______________________. *Annual Report of Financial Transactions Concerning Counties of California, FY 1968-69*. Sacramento: State of California.

______________________. *Annual Report of Financial Transactions Concerning School Districts of California, FY 1968-69*. Sacramento: State of California.

California State Department of Education, Bureau of Administrative Research and District Organization. *California Public Schools Selected Statistics 1968-69*. Sacramento: State of California, 1970.

————————————————, Bureau of Evaluation and Instructional Research. *California State Testing Program 1968-69*. Sacramento: State of California, 1970.

California Teachers Association. *California School District Financial Analyses, 1968-69*. Bulletin No. 239. Burlingame: California Teachers Association, December 1969.

————————————————. *Financing California Public Schools.* Burlingame: California Teachers Association, February, 1970.

————————————————. *Salaries and Salary Schedules for Administrators and Special Services Certificated Personnel, 1968-69*. Bulletin No. 231. Burlingame: California Teachers Association, January, 1969.

————————————————. *Teachers Salaries and Salary Schedules 1966-69*. Bulletin No. 230. Burlingame: California Teachers Association, January, 1969.

MICHIGAN STATE
(1968-1969)

INTRODUCTION

Michigan's school finance system relies on local district responsibility for raising revenues (largely through the property tax), supplemented by general state aid plus state categorical grants. In the sample district studied for the year 1968-1969, local revenues amounted to 59.5 percent of non-federal education aid, and state revenues, 40.5 percent, excluding state payments for the Public School Employees Retirement Fund. Total education revenues were distributed as follows: 55.9 percent local, 38.0 percent state, and 6.1 percent federal. These values exclude capital expenditures.

General state aid, which accounted for over 94 percent of all state aid to local school districts in 1968-69, is distributed according to a foundation plan. Four basic foundation formulas are applied to districts grouped on the basis of their property wealth per pupil. Each formula guarantees districts falling in the appropriate categories a minimum amount per pupil as determined by the state. If the specified minimum millage rate in any district will not raise sufficient local revenues to meet the designed foundation program amount, the state will make up the difference.[1/]

[1/] In 1968-69, the basic allowance, based on a district's per pupil state equalized valuation, was as follows:

Per Pupil Property Value	Basic Grant	Required Local Millage Rate
$21,000 or Over	$348.00	7 mills
12,737 - 20,000	326.75	5.86 mills
9,920 - 12,736	474.75	17.48 mills
9,919 or Below	499.75	20 mills

The analysis of school finance undertaken in Michigan is based on a sample of 99 school districts,[2] grouped by type of district as follows: one central city (Detroit) with a population of over 250,000, 22 suburban school districts, 26 smaller cities, and 50 rural districts. The average pupil population (in ADA) of the sample districts is 9,768. The sample districts comprise 53.2 percent of total state ADA.

All Michigan school districts are fiscally independent.

2/ This sample was selected from a total of 644 operating school districts in 1968-69.

PART I

INTER-DISTRICT REVENUE COMPARISONS

I. REVENUE SOURCES AND THEIR IMPACT ON DISPARITIES

The disparities in total per pupil revenues among the Michigan sample districts are greater than those of the other two moderate aid states -- California and New York -- included in this study. In fact, the disparities are greater than in any of the eight states studied, with the exception of Colorado.[3/]

The factors which contribute to these disparities in per pupil revenues in the state as a whole and in various categories of school districts, are discussed below. The primary factor, as in all states in this study, is the difference among the districts in local revenues raised. The distribution of state revenues considerably reduces these disparities.

Local Revenues. Local revenues are the primary source of educational funding in Michigan, contributing 55.9 percent of all revenues for elementary and secondary education. Local revenues are the lowest in rural areas, $303 per pupil, followed by Detroit, $427. Smaller cities contribute $469, suburban districts, $517. In Detroit, local revenues provide 51.9 percent of the total, in suburban areas 59.2 percent, in smaller cities 52.0 percent, but in rural areas, only 45.2 percent. In

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[3/] See Table II-2 in Chapter II, Vol. I.

the suburbs, Dearborn's local funding of $960 per pupil exceeds all other suburban districts. At the other extreme, Inkster contributes only $173. As can be seen, suburban districts encompass sharp local revenue disparities.[4/] Among smaller cities, the highest amount of local revenues is provided by Ann Arbor, which contributes $741 per pupil.

State Revenues. The state government provides 38.0 percent of all revenues for elementary and secondary education. The state's central city, Detroit, receives $299 per pupil, or slightly below the suburban average of $302. Smaller cities of Michigan receive the least state aid of any of the categories of school districts, $261, while the average state contribution in rural areas is $299, approximately the same as the Detroit and suburban state funding. The additional $65 per pupil from the state retirement fund, which was not able to be apportioned among the districts in this analysis, increases the average state revenue from $764 to $829 per pupil.

The range among suburbs is substantial, with Dearborn and Hamtramck, both with high property values per pupil, receiving just over $140 or half the suburban average. In contrast, Inkster receives $481.[5/] Among smaller cities, state aid to Ann Arbor is only $207, while Ironwood receives $416. The disparity in state aid to rural areas is small.[6/]

Federal Revenues. The federal government provides 6.1 percent of Michigan's revenues for education. This aid is concentrated in Detroit,

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[4/] The coefficient of variation for local revenues for the suburbs is .42, the highest among the four types of districts in Michigan.

[5/] The coefficient of variation for state aid to suburban districts is .25, the highest among the four types of districts in Michigan.

[6/] The coefficient of variation is a low .12.

which receives $98 per pupil. Suburbs average $21, smaller cities $36, rural areas $39. A number of suburban districts, such as Dearborn Heights, Southgate, and Warren, receive less than $10 per pupil in federal aid. Among suburban districts, Highland Park and Inkster receive the greatest amount of federal funds, $96 and $84 respectively. In the rural districts, Oscoda receives $193 per pupil; all but $2 of this from the federally impacted areas aid program (PL-874). Alcona receives over $100, comprised primarily of both Title I and impacted areas aid. As a result of the dominance of Detroit, which receives 54.7 percent of all federal funds, the average federal aid to urban areas is $48 per pupil, compared to the rural average of $37.

Impact of All Revenue Sources on Disparities. As noted previously, the greatest disparities are associated with local revenue, particularly in suburban areas.[7] The addition of state revenues decreases the disparities considerably, both statewide and within suburban districts.[8] The reduction in variation indicates that the state aid formula tends to have an equalizing effect, although it is not substantial enough to offset entirely the wide deviations in locally provided funds for education.

The inclusion of federal revenues has no further impact on reduction in disparities.

II. FISCAL CHARACTERISTICS OF SCHOOL DISTRICTS

Ability to pay for education is traditionally based on property wealth. This section looks at differences in property wealth and tax rates among types of districts. Per capita and per pupil income are also examined as measures of fiscal capacity.

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[7] v = .33 for all districts in the state; v = .42 for suburban school districts.

[8] v = .16 for all districts; v = .19 for suburban school districts.

A. Fiscal Capacity Measures

Per Pupil Property Wealth. The per pupil property wealth of Detroit is $33,616, only slightly above the suburban average of $33,312. However, the disparities in property wealth among suburban districts are substantial.[9] Industrial suburbs such as Dearborn Heights and Hamtramck, with property values of $76,876 and $66,944 respectively, differ sharply in property wealth from Inkster with its per pupil property value of $12,930. In contrast to other states, in Michigan the smaller cities have a higher per pupil property value, $35,586, than the central city. Ann Arbor and a number of cities with an industrial base, such as Pontiac, have property wealth in excess of $40,000 per pupil. Rural areas average $27,042 in property wealth, ranging from a low of $14,082 in Shelby to $66,336 in Houghton Lake. As would be expected, there is a strong positive correlation between local revenue and per pupil property wealth, instructional salaries, and percent teachers with advanced degrees.[10] However, there appears to be no relationship between per pupil property wealth and achievement test scores.

Per Capita Property Wealth. Per capita property values provide a somewhat different pattern from that of per pupil property wealth. Detroit, with a per capita property wealth of $6,780, is substantially below the suburban average of $7,632 and the $7,630 average of smaller city districts. Rural areas are also well above Detroit in terms of per capita property wealth, with an average per capita property value of $7,212. Detroit's low property wealth on a per capita basis seems to contradict its high wealth on a per pupil basis. But this phenomenon is in large part due to Detroit's high non-public school enrollment and fewer school age children in proportion to the total population.

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[9] The coefficient of variation is .49.

[10] r = .90, 166 and .59, respectively.

Per Capita Income. Average per capita income in Michigan for 1966 was $2,612, slightly below the level of that in Delaware and slightly above the level of the State of Washington. However, Detroit's per capita income, $2,551, is below the level of other central cities (with the exception of Manchester, New Hampshire) for which data have been obtained.[11] The suburban average of $3,158 does not deviate substantially from other states. Smaller cities have an income of $3,074, but per capita income in rural areas averages only $2,149. The income gap between urban (city and suburban) and rural areas of Michigan exceeds the gap in the other states included in the study.

Per Pupil Income. Per pupil income in Detroit is $13,599, only slightly below the suburban level of $14,613. Thus, the suburban districts are 7 percent higher than Detroit in terms of per pupil income, but 24 percent higher in terms of per capita income. This difference in per pupil and per capita income values, like the difference in per pupil and per capita property values, is due to the higher non-public school enrollment in Detroit and the fewer children per household attending schools due to out-migration of younger, child-bearing families. Smaller cities have lower per pupil income than the central city or its suburbs. Rural areas have a per pupil income of only $8,369, reflecting low non-public school enrollment and larger family size in those districts.

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[11] In addition to Michigan, income data were derived from an analysis of 1966 IRS returns for the states of Delaware, Hawaii, North Carolina, Washington, Colorado and New Hampshire. See Chapter II, Vol. I for a description of the methodology.

Property Tax Rates.[12] The average effective property tax rate for education in Michigan is $1.16 per $100 market value of property, about the same rate as California, but considerably below the level of New York State, which does not, however, tax personal property. The tax rate of $1.04 in Detroit is below the $1.31 suburban rate. However, because of differences in demand for public services between the city and suburbs, it is difficult to compare the city-suburban tax efforts for education alone. Smaller cities have an average tax rate of $1.21, rural districts only $0.87. As in most states, rural areas tend to tax themselves less than those urban areas which also have low property values. This results in low local revenues for education in rural areas in Michigan, as in other states.

B. State and Local Taxes for Education

State Taxes. In 1968-1969, three taxes comprised most of the general fund: individual income taxes (22.2 percent), corporate income and franchise taxes (27.6 percent), and sales and use taxes (28 percent).[13] Of the general fund, 30.4 percent is allocated for elementary and secondary education. In addition, a two percent sales tax and part of the state liquor and cigarette taxes are earmarked specifically for education rather than going into the general fund.

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[12] The Michigan State Constitution contains a number of restrictions on the local property tax: public utility property is exempt from local taxation, voter approval is required for any tax rate beyond 15 mills, and there is an absolute ceiling on the total property tax of 50 mills. Art. IX, Sec. 5 and 6, Michigan State Constitution.

[13] A study, undertaken specifically for this report, of the constitutional and legal constraints associated with state taxes which might limit the flexibility in providing additional revenues for education, indicates a number of areas which might present problems. The state income tax, first enacted in 1967, at a flat rate of 2.6 percent on personal income, 5.6 percent on corporate income, and 7.0 percent on the income of financial institutions, may not be a graduated tax. Sales taxes, half of which are earmarked for education, may not exceed four percent. And all motor vehicle fuel and registration taxes are specifically earmarked for highway purposes. Art. IX, Secs. 7, 9, and 10, Michigan State Constitution.

The methodology utilized for estimating state tax burdens in Michigan differs from that used for the other states because data specifying state income tax payments by income groups could not be obtained.[14] For this reason, the income tax values used are only approximations. Thus, estimated total state burdens cannot be compared with a high degree of reliability to other states.

Low income households (earning between $2,000 and $3,000) pay approximately 2.3 percent of their income for education via the state general fund and earmarked funds. Moderate income urban households ($7,500 to $9,999) pay 2.2 percent, higher income urban households ($15,000 and over), 1.7 percent. Thus, the state tax structure is slightly regressive.

Local Taxes. Almost all local revenues for education are derived from the property tax, on both real and personal property.[15] (Non-property revenues contribute only 0.7 percent of all local revenues for schools.) The local school tax burden ranges from 5.6 percent for low income households to 1.4 percent for households earning over $15,000.

Combined State/Local Taxes. In urban areas, total (state and local) tax burdens for low income households average 7.9 percent, moderate income households, 4.3 percent, and higher income households, 3.1 percent.

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[14] The flat rate income tax has only recently been introduced in the State of Michigan.

[15] In 1967, personal property amounted to 23.3 percent of locally assessed property. In Detroit and Dearborn, the percentage was higher than the state average.

Comparable tax burdens for rural areas were not computed for Michigan.

III. STUDENT CHARACTERISTICS

In Detroit, 59.2 percent of all students are black. This percentage drops sharply to 4.8 percent in the suburbs, where it is concentrated in three communities -- Highland Park (77.9 percent), Inkster (84.1 percent) and Hamtramck (30 percent). These three "suburban" communities have many characteristics considered typical of central cities. In most suburban districts, non-white enrollment is minimal. Within smaller cities, 17.3 percent of all students are black, while in rural areas, only 1.4 percent belong to this minority group.[16/] The average black enrollment for the state is a fairly high 24.0 percent, due primarily to the impact of Detroit's large black enrollment on the statewide average. Total minority enrollment in the state including non-blacks, is 25.8 percent.[17/]

A large non-public school enrollment was found to correlate strongly with high minority enrollment,[18/] suggesting that non-public school attendance is greatest in those large school districts with a high proportion of

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[16/] The ethnic distribution of teachers reflects that of the pupils. About 39 percent of Detroit's teachers are minority, compared to 3.9 percent in the suburbs, 8.6 percent in smaller cities, and 0.6 percent in rural districts. Almost all suburban minority teachers are concentrated in Inkster (84.9 percent of all teachers) and Highland Park (40.0 percent). Most suburbs have less than five minority teachers in their districts, while in the vast majority of rural areas, there are no minority teachers.

[17/] The highest proportion of non-black minority are comprised of Spanish-surnamed students.

[18/] $r = .85$.

minority students in the public schools. There is also a positive correlation between minority enrollment and average teacher salaries,[19] since Detroit has high average wages, while rural areas, with relatively low salaries, are practically all white.

Test score data for Michigan are available for both reading and comprehensive achievement tests. There is a negative correlation between reading test scores and minority enrollment.[20]

Achievement scores are lowest in Detroit. The suburban average achievement scores are higher than those of the smaller city districts, but are slightly below the rural average. In fact, rural areas have the highest achievement scores in the state, and the lowest differences in test scores of any of the types of districts. The higher disparity in reading scores within suburban districts is due primarily to the low reading scores in the districts of Hamtramck and Inkster.

Title I expenditures are concentrated in Detroit, where they average $49 per pupil. In suburban areas, Title I aid is only $6 per pupil, and in rural areas, $11 per pupil.

Non-public school enrollment is 24.5 percent of all enrollment in Detroit, above the 19.4 percent in suburban areas, but below the 26.4 percent found in the smaller city districts. Rural districts have the lowest percent of non-public school enrollment, 11.4 percent. Non-public school enrollment does not appear to differ sharply between the affluent and the poorer suburban districts. There are great disparities among smaller cities. Ann Arbor, with the highest per capita income, has a non-public school attendance of only 9.6 percent, while Grand Rapids and Bay City, with per capita income levels close to the state average, have about one-third of their students enrolled in non-public schools.

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[19] r=.65.

[20] r=-.85.

Comparison of Fiscal and Educational Measures of Need by Type of District. Detroit has about the same per pupil property values as its suburbs, and a lower property tax rate for education. Thus, on the basis of fiscal capacity and effort, Detroit is not in an unfavorable position relative to suburbs or smaller cities. However, it has a lower per capita income than the suburbs, ten times the share of minority students and seven times the share of Title I recipients. Since the correlation between low income, AFDC, race and achievement has been well documented, there would seem to be a greater need for additional resources in Detroit.

In the suburbs, the highest expenditure district, Highland Park, has high property value, above average per capita income, exceptionally high (80 percent) minority enrollment and substantial numbers of Title I recipients. The district with lowest expenditures, Southgate, has low property value, about the same tax rate as Highland Park, average income, almost no minority students, and 6.4 percent Title I recipients.

Among smaller cities, the highest expenditure district, Ann Arbor, has high property wealth, high income, 9.9 percent minority, and a high tax rate. In contrast, the lowest expenditure district has low property wealth, low tax effort, low income, and is practically all white.

In rural areas, as in suburbs, the highest expenditure district, Baldwin, has very high minority enrollment, high property values, low tax effort and low income. The lowest expenditure district has low property wealth, above the rural average tax effort, and is practically all white.

Interestingly, the highest expenditure school districts in each type of district have greater minority enrollment than the districts with the lowest expenditures.

As shown in Table M-1, there is a positive correlation between percent minority and federal revenues, and a slight (statistically insignificant) positive correlation between percent minority and total revenue. There is a negative correlation between minority enrollment and per capita income, and a slight positive (but not statistically significant) relationship between percent minority and per pupil income, per pupil property, and expenditures.

TABLE M-1

Correlation Coefficients

MINORITY ENROLLMENT AND FISCAL CHARACTERISTICS

MICHIGAN
Statewide Average (N=99)

Variable	
Revenues	
Total Revenue Per Pupil	.07
Local Revenue	-.01
State Revenue	.03
State & Local	-.007
Federal	.83*
Fiscal Capacity Measures	
Per Capita Income	-.51*
Per Pupil Income	.61
Per Pupil Property	.10
Expenditures	
COE	.11
Instructional Expenditures	.05

*1 percent level of significance

PART II

INTER-DISTRICT EXPENDITURE COMPARISONS

I. EXPENDITURE DIFFERENTIALS

The range in total per pupil expenditures in Michigan is from $836 per pupil in suburban districts to $567 per pupil in rural districts. The greatest differences are among suburban jurisdictions.[21] As in other states, the major contributing factor to disparities is the difference in instructional expenditures. Non-instructional costs are only slightly higher in urban relative to rural areas.

A detailed discussion of the expenditure pattern among the four types of districts follows. Table M-2 also provides a more complete picture of the distribution of expenditures by function.

Because teacher expenditures account for such a large part of the total differentials in school district spending, Section II examines four aspects of teacher expenditure differentials: pupil-teacher ratios, teacher education, years of experience, and starting salaries.

Total Current Operating Expenditures. The state average for total current operating expenditures is $764 per pupil. Total current expenditures in Detroit are $749 per pupil, slightly below the state average and considerably below the suburban average of $836. Thus, unlike the pattern in other states, the central city spends less than the balance of the state. Smaller cities spend $792 per pupil, while the average expenditure

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[21] The coefficient of variation is .33.

TABLE M-2

MICHIGAN - EXPENDITURES BY FUNCTION
(1968-1969)

	Central Cities		Suburban		Smaller Cities		Rural		Statewide Average	
	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent
Total Instructional	$554	74.0%	$642	76.8%	$607	76.6%	$417	73.5%	$578	75.6%
Principals & Supervisors	46	6.1	49	5.9	50	6.3	25	4.4	46	6.0
Teachers	435	58.1	501	59.9	475	59.9	346	61.0	454	59.4
Other Instructional Personnel	35	4.7	41	4.9	36	4.6	20	3.5	35	4.6
Other Instructional Expenditures	38	5.1	51	6.1	46	5.8	26	4.6	43	5.6
Total Non-Instructional	145	19.3	162	19.4	156	19.7	130	22.9	151	19.8
Administration	19	2.5	28	3.3	24	3.0	24	4.2	24	3.1
Transportation	9	1.2	13	1.6	18	2.3	39	6.9	17	2.2
Plant Operation	79	10.5	91	10.9	80	10.1	51	8.9	79	10.4
Plant Maintenance	30	4.0	24	2.9	27	3.4	14	2.5	25	3.3
Other Non-Instructional	8	1.1	6	0.7	7	0.9	2	0.4	6	0.8
Total Instructional & Non-Instructional	699	93.3	804	96.2	763	96.3	547	96.4	729	95.4
Total Fixed Charges & Other Miscellaneous Services	50	6.7	32	3.8	29	3.7	20	3.6	35	4.6
Total COE *	$749	100.0%	$836	100.0%	$792	100.0%	$567	100.0%	$764	100.0%

*Excludes Michigan Public School Employees Retirement Fund. This is paid directly by the state and hence cannot be allocated among the individual districts. The statewide average per pupil expenditures for employee benefits amount to $65 which would increase total statewide average per pupil expenditures from $764 to $829.

in rural areas of $567 is sharply below the urban average. Suburban districts spend $87 more per pupil than central cities, and $225 more than rural districts. In the suburbs, total current operating expenditures vary from a high of $1,369 in Highland Park to a low of $632 in Southgate.[22]

Instructional Expenditures. Instructional costs comprise 75.6 percent of all school expenditures in Michigan. In Detroit, these costs are $554 per pupil, considerably below the $642 suburban level.

Expenditures for principals and supervisors average $46 per pupil statewide, higher than in all other states examined in this study, with the exception of New York. In rural areas, this item totals only $25, undoubtedly reflecting lower salaries for supervisory personnel.

Salaries for classroom teachers average $454 per pupil, or 59.4 percent of current expenditures. Detroit spends $435 per pupil for teachers, below the suburban average of $501. The highest suburban expenditures for teachers are in Highland Park ($786 per pupil), Dearborn Heights ($777 per pupil), Dearborn ($751 per pupil) and Oak Park ($735 per pupil). The major factor in the expenditure disparities between Detroit and the affluent districts clearly is the expenditures for teachers. Suburban communities also spend more than Detroit for other instructional personnel.

Despite the dominance of teacher salaries, differences between Detroit and affluent suburbs can be noted for other instructional items. For example, Detroit spends $7 per pupil for supplies, suburbs $15. Royal Oak spends $26 for supplies, or about four times the Detroit average. Similarly, $5 per pupil is allocated for textbooks in Detroit, $10 on the average in the suburbs. Dearborn allocates $22 for books, Highland Park $28.

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[22] The coefficient of variation for expenditures in the suburban districts is .24.

In contrast, expenditures for clerical services, where the expenditures are primarily for salaries, are the same in the city and suburbs. The disparities in instructional expenditures among suburbs are substantial.[23] Eight of the twenty-two suburban districts studied have lower instructional expenditures than Detroit. Among the smaller cities, which spend an average of $607 for instruction, Ann Arbor has the highest expenditures per pupil.

Non-Instructional and Other Expenditures. Non-instructional expenditures comprise 19.8 percent of all expenditures in the state as a whole. Other expenditures, consisting primarily of fixed charges, constitute an additional 4.6 percent. Detroit spends $145 per pupil for non-instructional items. This is somewhat below the level of suburbs and smaller cities. The two factors causing lower central city expenditures are lower expenditures for administration and for transportation relative to other types of districts. Thus, contrary to the belief which has been expressed by many regarding high central city administrative costs, this analysis found that the $19 per pupil for administration in Detroit is substantially below the level of other types of districts in Michigan. Non-instructional expenditures for all items except transportation are lower in rural areas compared to urban areas. The largest differences are in plant operation and maintenance costs which amount to $115 per pupil in the suburbs, but only $65 in rural districts. The costs of maintenance, health services and attendance are higher in Detroit than in other types of school districts in Michigan.

A major expenditure item is $128 million paid directly by the state to the Public School Employee Retirement Fund -- about $65 per pupil. This item of expenditure cannot be allocated among individual school districts.

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[23] v=.23.

II. TEACHER CHARACTERISTICS

Starting salaries for teachers with a B.A. degree and no experience, as shown in Table M-3, are the highest in Detroit, followed by the suburbs, smaller cities and then rural areas. This pattern holds in other salary categories with one exception -- maximum salaries with an advanced degree are highest in suburbs, and second highest in Detroit.

TABLE M-3

MICHIGAN TEACHER SALARY SCHEDULES
(1968-1969)

	B.A. Degree Starting Salary	B.A. Degree Maximum Salary	M.A. Degree Starting Salary	M.A. Degree Maximum Salary
Central City	$7,500	$11,200	$8,000	$11,700
Suburbs	6,930	11,022	7,508	12,375
Smaller Cities	6,399	10,101	6,902	11,471
Rural Areas	6,393	9,416	6,818	10,136
SAMPLE AVERAGE	6,847	10,570	7,360	11,610

As Table M-3 indicates, the gap between urban (city and suburban) and rural areas increases with increased education and experience. For example, the salary for a teacher with a B.A. degree and no experience varies by only $537 between suburban and rural districts. However, maximum salaries with an advanced degree are $2,239 higher in suburban districts than in rural districts.

Average salaries are the highest in Detroit -- $10,782, followed by suburbs, $10,544 smaller cities, $10,238, and rural areas, $8,706.[24] The greatest disparity in teacher salaries within district categories is among suburban districts.[25] Among suburban jurisdictions, average salaries in Dearborn and Dearborn Heights are considerably above the suburban average.

Only part of the salary difference between Detroit and its suburbs and rural areas is due to salary differentials for equivalent education and experience, as the percent of advanced degrees and years of experience also varies among types of districts. In Detroit, 36.0 percent of all teachers have M.A. degrees or higher, compared to 32.6 percent in suburbs, 31.6 percent in smaller cities, and 18.8 percent in rural areas.

Among the suburban districts, 57 percent of teachers in Dearborn and 47 percent of teachers in Oak Park have advanced degrees. This is in contrast to Inkster where only 31 percent of the teachers have advanced degrees, and Madison Park, with only 11 percent.

Statewide, there is only a slight positive correlation[26] between education and experience of teachers. Thus, there is little inter-district relationship between education and years of experience. Average suburban experience is only 8.4 years, compared to 11.0 years in Detroit. The high average salary in Dearborn in explained by the fact that the district has both a high proportion of teachers with advanced degrees and with high levels of experience. Among suburbs, average experience in Dearborn is 14 years and Oak Park 9 years, compared to that in Inkster of 12 years. Although 25 percent of the teachers in Smithfield have advanced degrees, they average only five years experience. Teachers in rural districts have most longevity, with 11.2 years experience, the average in many of these districts being 14 years or more. (Lake City teachers average 15 years experience, but only 25 percent of the district's teachers have advanced degrees.) From a salary viewpoint, as was shown in Table M-3, there is less incentive for obtaining advanced degrees in rural districts.

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[24] Average teacher salary data provided by the Michigan State Department of Education, Bulletin 1012, 1968-1969, is as follows: Detroit, $9,691; suburbs, $9,721; smaller cities, $9,673; rural areas, $8,439. The values for Detroit compared to its suburbs, as provided by the state, differ from average salaries compiled for this report by dividing teacher salaries by the number of teachers in each school district. (The latter data were obtained from computer tapes provided by the Michigan State Department of Education for this study.) The higher salaries in Detroit relative to suburbs, as computed, appear more reasonable than the published data in view of the following: (1) starting salaries are higher in Detroit, (2) average years of experience is 2.6 years longer, (3) percent teachers with advanced degrees is higher, (4) provisions of the teacher's union contract with the Detroit School Board require the salary schedule to be based on the average of that in the five highest spending suburbs. In view of these factors, this study utilizes teacher salaries computed from state accounting data, as taken from Department of Education computer tapes, rather than the published data.

[25] v=.14.

[26] r=.22.

Pupil-teacher ratios [27] are as follows: Detroit, one teacher for every 24.8 students; suburbs, 1 to 21.1; smaller cities, 1 to 21.4; and rural areas, one teacher for every 24 students. Differences in student-teacher ratios explain why teacher expenditures are lower in Detroit than in the suburbs, despite the higher average teacher salaries in the city.

In the suburbs, the lowest pupil-teacher ratios are found in Oak Park, Dearborn, Dearborn Park, and Highland Park. These are the same school districts where the highest expenditures for teachers were noted. The general pattern which emerges shows that affluent suburban communities, together with Ann Arbor (classified as a smaller city), have more teachers with advanced degrees and lower pupil-teacher ratios relative to other urban districts.

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[27] Based on the number of teachers as reported by the Michigan State Department of Education.

SUMMARY

The analysis of Michigan shows that revenue disparities in the state exceed the average of other states examined in this study. These disparities are due primarily to differences in local revenues for education, since state aid is found to be generally equalizing. The districts with the greatest differentials in expenditures and other educational finance characteristics appear to be among the suburbs of Detroit.

Unlike other states, the central city per pupil property wealth is only slightly higher than the suburban average, with smaller cities having property values above the level of Detroit. On a per capita property wealth basis, as well as on a per capita income basis, Detroit is considerably below the average of suburban school districts.

The burden of the overall state tax structure could not be estimated with confidence in view of the absence of adequate state income tax information. On the basis of the limited data available, the state tax structure appears to be slightly regressive. The total tax burden for education is sharply regressive, due to the impact of the local property tax.

There is a considerable range in expenditures between suburban areas and rural districts, due primarily to differences in salaries for instructional staff. Unlike other central cities examined in this study, Detroit spends less per pupil than its suburbs, apparently due to higher pupil-teacher ratios in Detroit. The teachers with most experience are found in Detroit and in the rural districts, while the highest proportion of teachers with advanced degrees are located in the Detroit metropolitan area.

MICHIGAN
SAMPLE DISTRICTS
(1968 - 1969)

DISTRICT NAME	COUNTY
Central City	
Detroit	Wayne
Suburban Areas	
Allen Park	Wayne
Birmingham	Oakland
Dearborn	Wayne
Dearborn Heights	Wayne
East Detroit	Macomb
Ferndale	Oakland
Garden City	Wayne
Hamtramck	Wayne
Hazel Park	Oakland
Highland Park	Wayne
Inkster	Wayne
Lake Shore	Macomb
Lincoln Park	Wayne
Livonia	Wayne
Madison Heights	Oakland
Oak Park	Oakland
Roseville	Macomb
Royal Oak	Oakland
Southfield	Oakland
Southgate	Wayne
Warren	Macomb
Wyandotte	Wayne
Smaller Cities	
Adrian	Lenawee
Alpena	Alpena
Ann Arbor	Washtenaw
Battle Creek	Calhoun
Bay City	Bay
Benton Harbor	Berrien
Cadillac	Wexford
Escanaba	Delta
Flint	Genesee
Grand Rapids	Kent
Ironwood	Gogebic
Jackson Union	Jackson
Kalamazoo	Kalamazoo

	COUNTY
Lansing	Ingham
Marquette	Marquette
Menominee	Menominee
Midland	Midland
Monroe City	Monroe
Mt. Pleasant	Isabella
Muskegon	Muskegon
Owosso	Shiawassee
Pontiac	Oakland
Saginaw	Saginaw
Sault Ste. Marie	Chippewa
Traverse	Grand Traverse County
Wyoming	Kent
Rural Areas	
Alcona	Alcona
Allegan	Allegan
Alma	Gratiot
Baldwin	Lake
Benzie	Benzie
Big Rapids	Mecosta
Breitung	Dickinson
Brighton	Livingston
Calumet	Houghton
Caro	Tuscola
Cheboygan	Cheboygan
Clare	Clare
Coldwater	Branch
Crawford	Crawford
Croswell Lexington	Sanilac
Dowagiac	Cass
Elkton Pigeon	Huron
Fremont	Newaygo
Gaylord Comm.	Otsego
Gladwin	Gladwin
Glen Lake	Leelanau
Grand Ledge	Eaton
Greenville	Montcalm
Hastings	Barry
Hillman	Montmorency
Hillsdale	Hillsdale
Houghton Lake	Roscommon
Ionia	Ionia
Kalkaska	Kalkaska
Lake City	Missaukee
Lanse Twp.	Baraga
Lapeer	Lapeer
Ludington	Mason
Manistee	Manistee

	COUNTY
Manistique	Schoolcraft
Mio Au Sable	Oscoda
Munising	Alger
Onaway	Presque Isle
Ontonagon	Ontonagon
Oscoda	Iosco
Petoskey	Emmet
Reed City	Osceola
S. Haven	Van Buren
Shelby	Oceana
Standish Sterling	Arenac
St. Ignace	Mackinac
St. Johns	Clinton
Sturgis	St. Joseph
Tahquamenon	Luce
W. Iron	Iron

MICHIGAN

DATA SOURCES

A major portion of the data for these analyses came from unpublished sources furnished by various state agencies and from computer tapes furnished the Urban Institute by the Michigan Department of Education. The following is a partial list of published sources also drawn upon for this study:

Michigan Board of Education. Michigan Public Schools: Ranking of Michigan High School Districts by Selected Financial Data, 1968-69. Bulletin No. 1012. Lansing: State of Michigan, January, 1968.

Michigan Department of Administration. The Executive Budget for the, FY 1968-69. Lansing: State of Michigan.

Michigan Department of Education. Analysis of Michigan Public School Revenues and Expenditures, 1968-69. Bulletin 1011. Lansing: State of Michigan, December, 1969.

Michigan Department of Treasury, Research and Statistics and Data Processing Sections. Annual Report, Fiscal 1969. Lansing: State of Michigan, 1970.

NEW YORK STATE
(1968-1969)

INTRODUCTION

New York State's school finance system relies on local district responsibility for raising revenues (largely through the use of the real property tax), supplemented by general state aid plus some state categorical grants. For the sample districts selected for study, local revenues amounted to 53.9 percent of non-federal education revenue in New York State, and state revenues contributed 46.1 percent in 1968-69. Of total education revenues, including federal aid, the distribution is 51.6 percent local, 44.2 percent state, and 4.2 percent federal.

General state aid, which accounts for over 90 percent of all state aid to local school districts, is distributed primarily on the basis of a "variable percentage equalizing grant."[1] This grant is geared to the ratio

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[1] The aid formula is as follows:

$$\text{Aid Ratio} = 1.00 - \left[\frac{\text{District Property Wealth Per Pupil (WADA)}}{\text{State Property Wealth Per Pupil (WADA)}} \times .51 \right]$$

Per Pupil WADA means a weighted pupil in average daily attendance. An elementary student is given a weight of 1.00 and a secondary student a weight of 1.25. The above formula means that the state provides support for 49 percent of an average district's approved current operating budget or the aid ceiling, whichever is less. A dollar ceiling is placed on the amount of the local budget that will be subsidized. This amounted to $760 per WADA in 1968-1969. The flat grant is included in this amount. The formula is designed to distribute revenues in inverse proportion to property valuation -- the higher the fiscal capacity, as measured by per weighted pupil property values, the less revenues from the state. This equalizing approach is modified by a number of factors, which include the flat grant to all districts, regardless of property wealth (amounting to state's share. For a more complete discussion of the current New York State aid formula, see Berke et al., Revising School Finance in New York State, Final Report to the New York State Commission on the Quality, Cost and Financing of Elementary and Secondary Education (Aug. 1971).

of a local district's per weighted pupil property value. There is also a flat grant per weighted pupil which is guaranteed to all districts, regardless of fiscal capacity.

The analysis of school finance undertaken in New York State is based on a sample of 122 school districts,[2/] grouped by type of district, as follows: three are cities over 250,000 in population, 49 are suburbs of these three cities, 22 are smaller cities, and 48 are rural districts. The average pupil population (in ADA) of the sample districts is 14,900. The sample districts comprise 59.9 percent of total state ADA. The unusually large student population of New York City (953,107 in ADA) influences all state-wide analyses, which are weighted by enrollment. For this reason, expenditures by function were also analyzed excluding New York City.

The six largest school districts are fiscally dependent. The remaining school districts are fiscally independent.

[2/] This sample was selected from a total of 743 operating school districts in 1968-1969.

PART I

INTER-DISTRICT REVENUE COMPARISONS

I. REVENUE SOURCES AND THEIR IMPACT ON DISPARITIES

The disparities in total per pupil revenues among the sample districts in New York State are lower than in the other moderate aid states, California and Michigan, included in the study.[3] The disparities in terms of total non-federal support for education are somewhat higher,[4] indicating that the distribution of federal funds tends to lessen the disparities among school districts.

The factors which contribute to these disparities in per pupil revenues in the state as a whole, and in various categories of school districts, are discussed below. The primary factor is the difference in local revenue raised among the districts.[5] State revenues reduce the disparities somewhat, indicating that the state aid distribution formula tends to equalize, although not completely. The distribution of federal funds, as noted above, makes a further contribution toward equalization.

Local Revenues. Local school district revenues in New York State average $734 per pupil. This is higher than the average local revenues in New Hampshire, where education is supported mostly from the local property tax. Among the large cities, there are dramatic differences in local revenue: New York City raises $823 per pupil while Buffalo raises only $381.[6/]

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[3] The coefficient of variation is .13. New York State ranks 4th highest among the eight states included in this study in terms of the extent of the disparities in per pupil revenues. If New York City is excluded, the coefficient of variation increases to .19.

[4] The coefficient of variation for state/local revenues is .17 compared with .13 for total revenues.

[5] v=.31.

Suburban jurisdictions raise high local revenues, averaging $759 per pupil. Ten suburban districts raise over $1,000, including Great Neck which provides $1,806. The coefficient of variation among suburbs is exceptionally high.[7/] Smaller cities spend only $496 from local sources, which provides only 40 percent of all their school revenues. However, in contrast to other states, rural districts contribute more than smaller cities, an average of $546. A number of rural jurisdictions spend over $1,000, with the lowest local contribution $338. It is thus apparent that rural districts in the New York State sample make a substantial effort to support their schools with local taxes. The rural districts included in the sample, with an average ADA of 3,000 students, are not particularly small. In comparison, the average for suburban districts in the New York State sample is 8,200 students.

State Revenues. The three largest cities of the state receive an average of $576 per pupil in state aid. This is a higher absolute amount

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[6/] State documents show that the property tax in New York City raises $811 per pupil and an additional $12 per pupil through other miscellaneous taxes. These values may be misleading, however, since non-property taxes yield over 40 percent of the total city tax revenue, undoubtedly affecting school finances. If both property and non-property taxes in New York City are apportioned between school and municipal functions, school taxes account for approximately 26 percent of total city taxes.

[7/] $v=.43$.

than is provided to central cities in the other states included in this study. However, because of the high expenditure levels in New York City, state aid as a percentage of total school revenue appears to play a less prominent role, amounting to only 40 percent of the total revenue among the large cities. New York City receives $658, Rochester $439.

Suburban districts receive $635 in state aid, substantially above the central city average, providing 46 percent of all their school revenue. The range of state aid to suburban districts is considerable, varying from $391 in Great Neck to over $800 received by a number of suburban districts.

Smaller cities of New York receive only slightly less aid than suburbs, averaging $627. Differences in state support among smaller city districts are lower relative to suburbs, ranging from $460 in Albany to $962 in Amsterdam. The differentials in state aid among smaller city districts is less than that among suburban districts.[8/]

Rural areas receive the highest amount of state aid -- $680, which accounts for 57 percent of revenue from all sources.

Because of the nature of the state aid distribution formula, state aid is higher where property values are lower.[9/]

Federal Revenues. The average per pupil federal grant to New York State is $58, somewhat above the average of $51 for all states in the study. However, in large part because of high local and state revenues, federal funds provide proportionately only 4.2 percent of all New York

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[8/] The coefficient of variation for state aid is .24 for the suburbs, compared with .16 for the smaller cities.

[9/] r=-.75.

revenues, the lowest share of federal support among the states included in this study. The three largest cities average $71 in federal payments. However, New York City receives only $64; Rochester (because of Title III funds) receives twice this level. Suburban school districts, as in other states, receive low federal payments, with the exception of Hempstead, Mount Vernon and Lackawanna, which obtain substantial Title I funding. No suburban school district receives more than $13 in aid to federally impacted areas (PL-874). Smaller cities average $71, the same amount as the three largest cities. Title I payments to Albany and Syracuse are high, while Rome, with its large Air Force facilities, receives $84 in federally impacted areas aid. Unlike most states in the study, the rural districts in the New York state sample receive less than the urban districts, an average of only $18 in federal funds. No rural district receives more than $35 in Title I aid, and a number of rural districts receive no Title I aid whatsoever. Federal funds account for only 1.5 percent of all rural revenue, the lowest percentage of federal funds to any category of district among the eight states studied.

Impact of All Revenue Sources on Disparities. The disparities associated with local funds are reduced by more than half when state revenues are included. The addition of federal revenues results in a further, though slight, reduction in disparities in per pupil revenues.[10] Thus, both state and, to a lesser degree, federal funds tend to reduce the revenue disparities resulting from wide deviations in locally provided funds for education.[11]

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[10] The coefficients of variation are .31, .16, and .13, respectively.

There is, as in other states studied (with the exception of North Carolina), a negative correlation[12] between state aid and local revenue, suggesting that state aid goes to districts which raise relatively little revenue.

II. FISCAL CHARACTERISTICS OF SCHOOL DISTRICTS

A. Per Pupil Property Values and Taxes

1. Per Pupil Property Values

New York City, with its gross assessed value of property excess of $31.8 billion (1966), 41.8 percent of which is commercial and industrial property, clearly dominates property wealth in New York State. Per pupil full value property wealth in 1968-1969 was $45,513, compared to $40,197 in Rochester and $27,980 in Buffalo. One factor in the high per pupil property wealth in the City of New York, as in the central cities of other states, is the lower ratio of students who attend public schools compared to suburbs. The suburban per pupil property base average is $29,371, 51 percent below the average of the three largest cities in the state. (Per capita comparisons are unavailable, since per capita income and population data were not calculated for New York State).

The variation in property wealth among suburban districts in the state exceeds that of other types of districts in New York state.[13] For example. Great Neck has a per pupil property base of $58,356, Deer Park only $17,759.

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[11] Disparities in revenue sources are low in New York State because of the dominance of New York City. The exclusion of the city from the analysis increases revenue disparities to .47 for local revenue, .21 for local and state revenue, and .19 for revenues from all sources for the state.

[12] r=-.56

[13] v=.46

Smaller cities have an average per pupil property base of $25,895, with Albany's per pupil property value of over $50,000 making it the highest among the smaller cities in New York.[14] Rural districts, as in other states, have the lowest per pupil property value, averaging $21,320, with communities such as Jasper and Harpersville having less than $10,000 in property wealth per pupil.

The state average property base is $37,903, if New York City is included. The exclusion of New York City reduces the average per pupil property level to $27,651 or below the level of most states examined in the study, including New Hampshire.[15]

Not unexpectedly, there is a strong positive correlation between amount of local revenues raised and high per pupil property wealth. Similarly, there is a high correlation between total expenditures for teachers and property values and between teacher salaries and property values.[16]

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[14] One possible explanation for Albany's high per pupil property wealth is demographic. A low proportion -- only 7.7 percent -- of its total population (1970) is comprised of children between the ages of 5 to 14, compared to 19 percent in the total Albany SMSA. Census of Population and Housing, 1970.

[15] The average per pupil property base of five other states in this study, (California, Delaware, Michigan, North Carolina, Washington) is $39,889. Although four of these five states include in their property base personal property, the value of personal property is insufficient to eliminate the property value gap between New York and the average of the other states. For example, California's property base is $45,234 per pupil, of which 13.3 percent represents personal property. Thus, if only real property is computed in California, the average per pupil property value would be $39,217.

[16] The correlation coefficients are, respectively, r=.71, r=.75, and r=.61.

2. Property Tax Rates

The relatively low property values in the state (at least when compared with the average of all states included in this study) combined with high local revenues for education, means that New Yorkers are paying exceptionally high local property taxes for their public schools. The three largest cities of the state support schools with an average effective property tax rate of $1.48 per $100 full value -- considerably above the average of other central cities in the sample states. New York City, despite its high property wealth, has a fairly high tax rate of $1.41, while the rate in property-poor Buffalo is only $0.95. The average suburban property tax is $2.09, and in a number of suburban districts exceeds $3.00. Affluent suburban jurisdictions with high property values, such as Great Neck, maintain above average property taxes. Property taxes are lower in smaller cities relative to suburbs, averaging $1.67, with only a few districts exceeding $2.00. In rural areas, property taxes are $1.75, slightly above the average of smaller cities.[17/] However, in each type of district, particularly in rural districts, average property tax rates are higher in New York than those in any of the other sample states with the exception of New Hampshire. Even if adjustments are made for differences in the property base, New York tax rates, again with the exception of New Hampshire, remain the highest among states examined in this study.[18/]

[17/] New Hampshire and New York are the only two states of the seven examined for this aspect of the study where rural property tax rates exceed the smaller city rates.

[18/] For example, the average tax rate for schools in California is $1.15 per $100 market value. California taxes personal as well as real property. If only real property were taxed, the rate would only increase to $1.37, still considerably below the New York State average. In Michigan, the average tax would increase from $1.16 to $1.51, also below the New York State average.

3. Assessment Practices

A study of the assessment practices in New York State, undertaken for this report, indicates that the quality of assessment administration is low in that state. There are considerable disparities in the ratios of assessed to market values of taxable property. This is due to a number of factors:

(1) Apart from the central cities, most assessment districts are relatively small.[19]

(2) There is no effective state supervisory or corrective role in the assessment process.

(3) There has been judicial toleration of assessment practices of the sort that are not accepted by the courts in other states.

Disparities exist among jurisdictions, among property classes within a single assessment district,[20] and among individual properties within a single class in a given assessment district.[21] The situation is such that unless assessment practices are reformed, perhaps by a state takeover of assessment administration, these assessment inequities will pose serious obstacles to the adoption of a statewide property tax for financing schools.

B. State and Local Taxes for Education

State Taxes. New York allocates 34.6 percent of its general fund tax revenues for primary and secondary education. The major two revenue sources are highly progressive income tax (up to 14 percent of taxable revenue) and a two percent sales tax. The over-all state tax structure for education is progressive, ranging from 1.4 percent for urban households under $3,000 to 3.1 percent for urban households earning $15,000 and over. At higher income levels, state taxes are considerably above the average of other states in the sample.

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[19] New York is one of the fewer than twenty states in which assessment is undertaken below the county level. Ther are approximately 1,000 assessing jurisdictions in the state.

[20] According to the New York State Statistical Yearbook, 1971, in half the cities and one-third of the towns assessment ratios for single-family houses are well below the average of all other classes. In two-thirds of the cities and 40 percent of the towns, the commercial property ratio is well above average; while industrial property tends to be at the average.

[21] In the case of single family housing, the easiest class of property to assess, the coefficient of dispersion in 1966 for the eight largest cities in the state was typically between 20 and 25 percent.

A study, undertaken for this report, of the constitutional and legal constraints associated with state taxes which might limit their flexibility in providing additional revenues for education, indicates that there are no significant restrictions on the state's taxing power. The only exception is that intangible personal property is constitutionally exempt from taxation either by the state or by local governments.

Local revenues are derived primarily from the property tax, although a few districts impose a sales or utility tax to finance schools. However, about 97 percent of all local revenue for education is from property taxes.[22/] As noted above, there are no constitutional restrictions on the state's taxing power. However, some of New York's local governments are subject to constitutional tax rate limits.[23/] Local governments are divided into four classes with respect to the taxing limitations:

(1) New York City -- a 2.5 percent limit for all school, municipal, and county purposes.

(2) The five other large cities with dependent school systems -- 2.0 percent for school and municipal purposes.

(3) Smaller cities with independent school districts[24/] -- 2.0 percent for school tax purposes.

[22/] As New York City is a dependent school district, property tax rates do not fully reflect expenditures for schools.

[23/] Art. VIII, New York State Constitution.

[24/] There are 56 such jurisdictions.

(4) Non-City school districts -- no tax limits.

These tax limits present problems only for city governments -- and the extent of the problem varies directly with size.[25]

New York has the second highest effective property tax rates (surpassed only by New Hampshire), and the highest local taxes for education as a share of money income of any state examined.[26] These range from 11.0 percent of income in the $2,000 to $2,999 household group to 2.2 percent in the highest household income group. Combined state and local taxes in New York are 12.5 percent for the lowest income group, 8.3 percent for incomes between $4,000 and $4,999, 5.6 percent for incomes between $7,500 to $9,999, and 5.4 percent for incomes $15,000 and over. Combined rates in each income category are above the level of other states examined in this study.

III. STUDENT CHARACTERISTICS

In New York's three major cities, 32 percent of all students are black, and an additional 21 percent are Spanish-surnamed Americans. In contrast, but following the national pattern, suburban enrollment consists of only 6.5 percent black and 1.4 percent Spanish-surnamed Americans. Four suburban districts (Hempstead, Freeport, Mount Vernon and Greensburgh) have a minority enrollment of over 25 percent. Two of these districts are spending above the suburban average and two below the suburban average. The proportion of minority students in rural areas is minimal. Minority students account for 35 percent of total state enrollment.[27]

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[25] All cities over 100,000 population use virtually all their legal taxing authority; four of the nine cities in the 50,000-100,000 range use over 90 percent of their authority, and three more use between 80 and 90 percent. Few of the smaller cities come close to their limits. The most severe problems are in the six largest cities with dependent school systems -- not one of them has any leeway to raise their effective tax rates for school purposes.

[26] The metropolitan area house value to income ratios in New Hampshire are lower than those in New York metropolitan areas, indicating that New York residents spend a higher share of their income for housing compared to New Hampshire.

Following the pattern of minority enrollment, the average Title I aid per student in the three large cities is $48, compared to only $14 in the suburbs and $9 in rural districts of New York.

There is a positive correlation between high local aid and minority enrollment, and a negative correlation between state aid and minority enrollment. These relationships are strongly influenced by New York City, which has very high minority enrollment as well as very high property values (hence low state aid) and a high proportion of locally derived revenues.

Reading scores[28] (Grades 3 and 6) in all three major cities, and particularly in Buffalo, are below the state average. In contrast, in only one suburban district are the reading scores below the state average. In New York City, 43 percent of all Grade 3 students are below minimum competence, as defined by the state, in reading achievement.[29] No single suburban or smaller city district comes close to the low achievement levels of New York City. The percentage of students below minimum competence in suburban school districts is 16.7 percent. In smaller cities, 23 percent of students are below minimum competence, while in rural areas, only 13 percent are in this category. Thus, somewhat surprisingly, relatively fewer children in rural areas lack basic reading competence than in suburban areas, and average reading scores are higher in rural jurisdictions than in other types of districts in New York State. As a result, there is a positive correlation between higher total expenditures and percentage of students who do not meet minimum competence levels. However, these inter-district comparisons should be viewed cautiously since many interdependent factors affecting reading scores are "washed out" when comparing massive school systems such as New York City and a rural district with 3,000 students. In addition, the cost of resources, such as teacher salaries, is greater in urban areas than in rural districts.

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[27] Only 6.4 percent of teachers in New York State are from minority groups. These teachers are primarily concentrated in New York City and Buffalo, although they constitute only 9.1 percent of all teachers in these cities. (This compares with 38.8 percent in Detroit for a minority enrollment only slightly higher than that of New York City.)

[28] Achievement score data are from the New York State "Pupil Evaluation Program" Reading Achievement Tests, administered in Grades 3 and 6.

[29] Students "below minimum competence" are those who score in approximately the bottom quarter of those taking the test.

PART II

INTER-DISTRICT EXPENDITURE COMPARISONS

I. EXPENDITURE DIFFERENTIALS

The disparities in total per pupil expenditures for the State of New York are relatively low.[30/] As in every state examined in this study, with the exception of Washington, the disparities are greater among the suburban school districts than among any other type of district.

The principal factor contributing to these disparities is the difference in instructional costs. Non-instructional costs contribute little to the expenditure differences among districts, and have no impact whatever on the expenditure differential between the large cities and rural districts.

A detailed discussion of the expenditure pattern among the four types of districts follows. Table NY-1 also provides a more complete picture of the distribution of expenditures by function.

Because teacher expenditures account for such a large part of the total differentials in school district spending, Section III examines four aspects of teacher differentials: pupil-teacher ratios, education, experience, and starting as well as average teacher salaries.

Total Current Operating Expenditures. Operating expenditures for New York State, which average almost $1,230 per pupil, are substantially higher than in other states studied. These costs are highest in the three

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[30/] The coefficient of variation is .12. The exclusion of New York City increases the coefficient of variation to .16.

TABLE NY-1

NEW YORK - EXPENDITURES BY FUNCTION
(1968-1969)

	Central Cities		Suburban		Smaller Cities		Rural		Statewide Average	
	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent	Dollars Per Pupil	Percent
Total Instructional	$ 827	64.7%	$ 779	62.5%	$ 676	62.7%	$ 634	61.4%	$ 785	63.9%
Principals & Supervisors	93	7.3	70	5.6	58	5.4	47	4.6	80	6.5
Teachers	668	52.3	603	48.4	527	48.8	495	47.9	625	50.9
Other Instructional Personnel	26	2.0	13	1.0	20	1.9	8	.8	21	1.7
Other Instructional Expenditures 1/	40	3.1	93	7.5	71	6.6	84	8.1	59	4.8
Total Non-Instructional	240	18.8	261	21.0	215	19.9	239	23.1	242	19.7
Administration	36	2.8	38	3.1	35	3.2	34	3.3	36	2.9
Transportation	59	4.6	45	3.6	29	2.7	70	6.8	54	4.4
Plant Operation & Maintenance	106	8.3	119	9.6	103	9.6	94	9.1	108	8.8
Other Non-Instructional 2/	39	3.1	59	4.7	48	4.4	41	3.9	44	3.6
Total Instructional & Non-Instructional	1,067	83.5	1,040	83.5	891	82.6	873	84.5	1,027	83.6
Total Fixed Charges & Other Miscellaneous Services	211	16.5	205	16.5	187	17.4	160	15.5	202	16.4
Community Services & Special Schools	25	2.0	15*	1.2	17	1.6	6	.6	21	1.7
Other Costs 3/	186	14.5	190	15.3	170	15.8	154	14.9	181	14.7
Total COE	1,278	100.0%	1,245	100.0%	1,078	100.0%	1,033	100.0%	1,229	100.0%
Less Federal	71		29		71		18		57	
	$1,207		$1,216		$1,007		$1,015		$1,172	

*Adjusted Value

1/Includes clerical staff, supplies, textbooks, library

2/Includes health, food attendance, social services

3/Includes fixed charges and expenditures not otherwise accounted for.

largest cities, slightly lower in the suburban districts, but substantially lower in the smaller cities and rural areas. New York City spends $1,285, almost $200 more than the second largest jurisdiction, Buffalo.

Among suburban communities, Great Neck spends over $2,000, but eight suburban districts spend considerably less than either New York City or Rochester. Binghamton, Jamestown, Elmira, Lockport, and Rome all have operating expenditures below $1,000.

Rural districts indicate the same pattern as the smaller cities, with relatively little variation among rural areas.31/ Thirty of the forty-seven rural districts have expenditures exceeding $1,000, which is above the level of almost all central cities and suburbs in the other seven states included in this study. Thus, high expenditure levels in New York are not limited to the large urban centers or the affluent suburban districts.

Instructional Expenditures. Instructional expenditures account for 64 percent of all current costs of education. This percentage is somewhat higher in urban areas relative to rural areas, since instructional expenditures are higher in urban districts, while non-instructional expenditures show little variation among the two types of districts. One-half of the total expenditures (which excludes teacher benefits, as these costs are included under fixed costs) are for classroom teachers' salaries -- amounting to $625 per pupil. An additional 8.2 percent of current costs accounts for other instructional personnel, including principals. In comparison, classroom teacher salaries in the other states in this study

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31/ The coefficient of variation in total per pupil expenditures in the suburbs is .17 compared with that of .09 in the smaller cities and .13 in the rural areas.

average $467 per pupil. Costs for principals and supervisory personnel are particularly high in New York City, $93 per student, and in Rochester, $111 per student. These costs drop to an average of only $47 in rural districts. In the three largest cities, principals and supervisors account for 8.7 percent of all current expenditures, a considerably higher proportion than that spent by central cities in the other states included in this study. The highest expenditure for principals is in Great Neck, $123 per pupil. The state-wide average expenditure per pupil for this item is $80, almost twice the average expenditure in the other states examined.

Non-Instructional and Other Expenditures. Total non-instructional expenditures average $242 per pupil, considerably above the $161 average of the study states. However, since New York has high instructional costs, these non-instructional functions account for less than 20 percent of current expenditures. It is interesting to note that per pupil non-instructional costs in the three largest cities in the rural areas are essentially identical, although instructional costs vary by $193. Thus, non-instructional costs (other than fixed costs), have no impact whatever on the expenditure differential between the large cities and rural districts. Smaller cities have low non-instructional costs because transportation averages only $29 per pupil, substantially below the cost in other types of districts in New York. Plant operation and maintenance costs (which are not separated for accounting purposes in New York State) show little variation among types of districts, although they are slightly lower in the rural districts.

Fixed costs, reflecting teacher benefits, are the highest in central cities and suburbs, lowest in rural areas. Costs for community services are also highest in the central cities. (In New York State, all teacher benefits are paid directly by the district.)

II. IMPACT OF NEW YORK CITY ON AVERAGE STATEWIDE EXPENDITURES

As noted previously, New York City accounts for half of the total state sample ADA. Since New York City expenditures vary somewhat from the balance of the state, it was thought that statewide average expenditure values might be misleading. A comparison of expenditures including and excluding New York City was therefore undertaken, as shown in Table NY-2. Total current operating costs for the sample districts in the state, excluding New York City, are $1,160, only $69 per pupil less than when New York City is included in the analysis. This difference of $69 is primarily attributable to differences in teacher salaries. Based on this analysis, it appears that New York State expenditure data are not distorted by its largest city. However, the coefficient of variation is increased if the city is excluded, since New York City expenditures are close to the state average.

III. EFFECT OF TEACHER CHARACTERISTICS ON EXPENDITURE DIFFERENTIALS

A major factor resulting in high per pupil instructional costs in New York relative to other large states is the difference in pupil-teacher ratios. In New York State, there is one teacher for every 17.7 pupils. In the three largest cities, the ratio is 1 to 17.2, in suburbs 1 to 18.2 (the ratio in Great Neck is 1 to 15.2), and in rural areas, 1 to 18 (although a number of the rural districts studied have more than twenty pupils per teacher). Exact comparisons with other states are difficult, since definitions of what comprises a classroom teacher may vary. Expenditures in New York for "other instructional personnel" are below the level of other states, implying differences in classroom teacher definition. However, when all instructional personnel in New York are added to classroom

TABLE NY-2

IMPACT OF NEW YORK CITY ON AVERAGE STATEWIDE EXPENDITURES

	New York State Including New York City	New York State Excluding New York City
Total Instructional	$ 785	$ 725
Principals & Supervisors	80[1]	65
Teachers	625	561
Other Instructional Personnel	21	16
Other Instructional Expenditures	59	83
Total Non-Instructional	242	244
Administration	36	36
Transportation	54	46
Plant Operation & Maintenance	108	113
Other Non-Instructional	44	49
Total Instructional & Non-Instructional	1,027	969
Total Fixed Charges & Other Miscellaneous Services	202	191
Community Services & Special Schools	21	14
Other Expenditures (including fixed charges)	181	177
Total COE	$1,229	$1,160

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[1] Principals in New York City, as shown in Salary Schedules for Principals 1969-1970, National Education Association Report 1970 R-5 (Washington, 1970) are receiving salaries about 25 percent above the average of other urban districts in New York State.

teachers, the result still is lower pupil-instructional staff ratios in New York than in the other states studied.

Both Michigan and California had higher beginning teachers' salaries (for a bachelor's degree with no experience) than New York State in 1968-1969. In general, starting salaries in New York State are only slightly above those in most of the states studied. Thus, starting salaries account for little of the salary expenditure differentials between New York and the other states.

In the central cities of New York, beginning teachers' salaries average $6,755, only slightly above the level of central cities in the other states studied. However, New York suburban districts have slightly higher starting salaries, $6,803, than either central cities or suburbs in any of the other states in the study, with the exception of Michigan. Starting salaries in the rural areas of New York are above the average for all rural districts in the study states. However, the starting salaries in the rural districts of Michigan and Washington are higher than New York's.

Despite minor differences in beginning teacher salaries, average salaries in New York are above those of other states in the sample. The average salary payments for the state are $10,965, compared to just over $10,000 in California and Michigan. The average salaries in the three largest cities are $11,474, due exclusively to the dominance of New York City, which pays an average of $11,650 to its teachers. In comparison, Detroit salaries average $10,872, the large cities of California, $10,456. Suburban districts of New York pay $10,891, compared to the suburban average for all states of $9,965. A number of suburban jurisdictions, such as Great Neck and Briarcliff Manor, pay over $13,000 per teacher; most suburban districts, however, pay less than $10,000. The average smaller city salary is $9,681, average rural salary $9,159.

As to educational background, New York City (but not Buffalo and Rochester) have exceptionally high percentages of teachers with advanced degrees. Thus, in the large cities, 40.6 percent of the teachers have a B.A. plus 30 credits and an additional 19.4 percent have either an M.A. plus 30 or more credits or a doctorate. In suburban districts, 55 percent of all teachers have a B.A. plus 30 credits or more, including 14 percent with more than an M.A. As in other states, the percentage of teachers with advanced degrees drops in smaller cities, and is even less in rural areas.

The average years of teaching experience (within their present school districts, since data on total teaching experience were not available) in the three largest cities of New York is 6.2 years, below the suburban average of 7.3 years, but slightly above the 6.1 year rural average.

SUMMARY

Local and state revenues for education in New York exceed other states examined in this study, with revenue variations between districts close to the average of other states. There are sharp differences in revenues raised by local districts among central city, suburban and rural districts. Suburban districts, because of their lower property values, receive less state aid than New York City. In general, state aid in New York equalizes the disparities caused by differences in local revenue to some degree.

Per pupil property values, based on real property alone, are dominated by New York City. The average per pupil property base in the state is reduced by almost 30 percent with the exclusion of the nation's largest city, bringing the state below the average of the other states examined. Property tax rates are the highest for all types of districts among states examined, with the exception of New Hampshire. Rural area tax rates are above those of smaller cities, unlike the pattern in most states.

The state general fund tax structure is progressive, but when combined with the regressive local tax structure, the overall tax burden for education is regressive. New York and North Carolina have the highest overall taxes as a proportion of income for education among states examined.

Expenditures in New York are sharply higher than among other states studied, due primarily to high instructional staff expenditures. However, expenditures for almost all functions are also above the level of the other states studied. Specifically, student-teacher ratios are lower, and average salaries higher than other states. The exclusion of New York City has little effect on total per pupil expenditures, indicating that per pupil expenditures are high throughout most of the state.

NEW YORK
SAMPLE DISTRICTS
(1968 - 1969)

DISTRICT NAMES	COUNTY
Central Cities	
New York City	
Buffalo	Erie
Rochester	Monroe
Suburban Areas	
East Meadow	Nassau
Farmingdale	Nassau
Great Neck	Nassau
Hicksville	Nassau
Levittown	Nassau
Plainview	Nassau
Sewanhaka	Nassau
Bethpage	Nassau
Freeport	Nassau
Hempstead	Nassau
Herricks	Nassau
Plainedge	Nassau
Port Washington	Nassau
Wantagh	Nassau
Locust Valley	Nassau
Manhasset	Nassau
Brentwood	Suffolk
Commack	Suffolk
Lindenhurst	Suffolk
South Huntington	Suffolk
Bay Shore	Suffolk
Copiague	Suffolk
Deer Park	Suffolk
Huntington	Suffolk
Middle Country	Suffolk
Northport	Suffolk
Patchogue	Suffolk
Smithtown	Suffolk
Bayport Blue Point	Suffolk
Bellport	Suffolk
Harborfields	Suffolk
Middle Island	Suffolk
Yonkers	Westchester
Mount Vernon	Westchester
New Rochelle	Westchester
Hendrick Hudson	Westchester

DISTRICT NAMES	COUNTY
Briarcliff Manor	Westchester
Greenburgh	Westchester
Edgemont	Westchester
Spring Valley	Rockland
Kenmore	Erie
Lackawanna	Erie
Cheektowaga	Erie
Depew	Erie
Greece	Monroe
Irondequoit	Monroe
Penfield	Monroe
Fairport	Monroe
Pittsford	Monroe
Smaller Cities	
Albany	Albany
Binghamton	Broome
Johnson City	Broome
Jamestown	Chautauqua
Elmira	Chemung
Hudson	Columbia
Watertown	Jefferson
Oneida	Madison
Amsterdam	Montgomery
Niagara Falls	Niagara
Lockport	Niagara
Rome	Oneida
Utica	Oneida
Syracuse	Onondaga
Geneva	Ontario
Newburgh	Orange
Troy	Rensselaer
Ogdensburg	St. Lawrence
Saratoga Springs	Saratoga
Schenectady	Schenectady
Ithaca	Tompkins
Kingston	Ulster
Rural Areas	
Niskayuna	Schenectady
Jasper	Steuben
Wayland	Steuben
Monticello	Sullivan
Lansing	Tompkins
Highland	Ulster
Pottersville	Warren
Salem	Washington

DISTRICT NAMES	COUNTY
North Syracuse	Onondaga
Baldwinsville	Onondaga
East Syracuse	Onondaga
Canandaigua	Ontario
Carmel	Putnam
Averill Park	Rensselaer
Hoosic Valley	Rensselaer
Eden	Erie
Churchville-Chili	Monroe
Guilderland	Albany
North Colonie	Albany
Bethlehem	Albany
Green Island	Albany
Frontier	Erie
Windsor (Palmer)	Broome
Harpursville	Broome
Vestal	Broome
Salamanca	Cattaraugus
Moravia	Cayuga
Chautauqua	Chautauqua
Mayville	Chautauqua
Afton	Chenango
Dannemora	Clinton
Germantown	Columbia
Chatham	Columbia
Ichabod Crane	Columbia
New Lebanon	Columbia
Dewitt	Onondaga
Wappingers Falls	Dutchess
Millbrook	Dutchess
Red Hook	Dutchess
Webutuck	Dutchess
Broadalbin	Fulton
Oakfield Alabama	Genesee
Chittenango	Madison
Fonda Fultonville	Montgomery
Lewiston Porter	Niagara
Newfane	Niagara
New Hartford	Oneida

STATE OF NEW YORK

DATA SOURCES

A major portion of the data for these analyses came from unpublished sources furnished by various state agencies and from computer tapes furnished the Urban Institute by the New York Department of Education. The following is a partial list of published sources also drawn upon for this study:

New York State Department of Audit and Control. Financial Data for School Districts: Year Ending June 30, 1969. Albany: State of New York, 1970.

New York State Department of Taxation and Finance. The New York State and Local Tax System. The State Campus Albany: State of New York, revised as of January 1, 1970.

New York State Education Department, Bureau of Educational Finance Research. Analysis of School Finances, New York State School Districts, 1968-69. Albany: State of New York, May, 1970.

______________________________, Bureau of Educational Finance Research. Studies of Public School Support, 1968 Series. Albany: State of New York, May, 1969.

______________________________, Bureau of Statistical Services, Information Center on Education. Annual Educational Summary, 1968-69. Albany: State of New York.

______________________________, Division of Educational Finance. Report of 1968-69 Allocations to New York State Local Educational Agencies under Title I of the Elementary and Secondary Education Act. Albany: State of New York, January, 1969.

______________________________, Division of Educational Finance. State Aid for Elementary and Secondary Education in New York State as Apportioned in 1968-69. Albany: State of New York, May, 1970.

LOW STATE AID STATES

STATE OF COLORADO
(1968-1969)

INTRODUCTION

Colorado is one of the two states included in this study in which public education must depend primarily on local resources. Among the sample districts selected for this study, local revenues in 1968-69 provided 72.4 percent of all funds and state revenues the balance of 27.6 percent. The inclusion of federal aid results in the following distribution: 66.7 percent local, 25.4 percent state, 7.9 percent federal.

State general aid is distributed through two programs -- a foundation program and a program termed the Public School Property Tax Relief Fund. The foundation program guarantees $5,400 for each classroom unit of 25 students in ADA.[1] The Property Tax Relief Fund is distributed as a flat grant and amounted to $52 per pupil in ADA for July 1 to October 31, 1968 and $65 per pupil in ADA for January 1 to June 30, 1969. There are also several categorical programs.

The analysis of school finance in Colorado[2] is based on a sample of fifty-five districts, grouped as follows: the central city of Denver, eight suburbs, eleven smaller cities, and thirty-five rural areas. (There

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[1] The formula, in 1968-69, was as follows:

$$.0057 \left[\frac{\text{County adjusted gross income} + \text{Property Value}}{\text{Number of Classroom Units}} \right]$$

Plus required support from county of $200 per classroom unit.

[2] As noted in Chapter II, Vol. I, only limited data were collected for the State of Colorado since this state was not part of the original study. It was subsequently added, as was New Hampshire, at the request of the President's Commission on School Finance.

were 185 operating school districts in 1968-69).

Denver ADA is 86,988, the average suburban ADA 15,413, smaller cities ADA 11,474, and average ADA in rural areas 1,438.

I. REVENUE SOURCES AND THEIR IMPACT ON DISPARITIES

Total school revenues in Denver amount to $836 per pupil, sharply above the suburban average of $593. Smaller cities spend $662, and rural areas, $644. The disparities in total per pupil revenues among school districts are greater than in any of the other states included in this study.[3]

Local Revenues. Local revenues in Denver are $651 per pupil, or 78 percent of total revenues. Suburban revenues are sharply lower, only $366, ranging from $304 to $535. About 61 percent of all revenues in suburbs come from local sources. Smaller city district local expenditures range from $149 per pupil in Air Academy (which receives substantial federally impacted areas aid) to $550 in Boulder, one of the largest cities in the state. Colorado Springs, which has the second highest enrollment in Colorado, raises $402 locally. Rural areas average $414 from local sources, with the highest variation among the four types of districts in Colorado. Thus, unlike most states, rural areas in Colorado raise more local revenues per pupil than either the smaller cities or suburban districts.

State Revenues. State revenues average $176 per pupil. Denver receives $125 in state aid, suburbs $184, smaller cities $187, and rural areas the highest share of state revenues -- $214 per pupil. In rural areas, state revenues comprise 33.2 percent of all revenue, compared to only 14.8 percent in Denver. The variation in state aid among suburban districts is low. It is even smaller among smaller cities.[4] However, there are considerable differences in state aid to rural districts, reflecting in part, sharp differentials in property values. Thus Akron, with a per pupil property base of $52,110, receives $93, while Sanford, with a per pupil property base of $15,173, receives $271 in state aid. However, a number of districts with high property values also receive large state payments.

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[3] v = .16.

Federal Revenues. Average federal revenues to Colorado amount to $52 per pupil. The greatest amount is received by Denver, $60, followed by rural districts, $55, smaller cities, $51, and suburbs, $44 per pupil. Thus, federal aid is distributed quite evenly among the categories of districts. However, the variation in federal aid to rural areas is extremely great.[5] Since data collected for Colorado did not include the type of federal aid program, causes for this variation cannot be ascertained. Federal aid does reduce somewhat the disparities among school districts.[6]

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[4] v = .09 and .07, respectively.

[5] v = .79.

[6] The coefficient of variation for local revenues is .29. The addition of state revenues reduces this to .17 and the inclusion of federal revenues reduces the disparities still further, to .16.

II. FISCAL CHARACTERISTICS OF SCHOOL DISTRICTS

A. Per Pupil Property Values and Per Capita Income

Property Values. In Colorado, 15.4 percent of the property base is comprised of personal property, the balance of real property. The average per pupil property value for the state is $33,644. Denver, the central city, has a per pupil average of $48,800, compared to only $29,290 in the suburbs.[7] There is a considerable variation in suburban property values[8] ranging from $17,273 per pupil in Sheridan to $72,417 in Westminster. Smaller cities have an average value of $27,289, rural areas an average of $33,802, or above smaller cities. This is in contrast to other states in this study. Rural area property wealth varies considerably,[9] ranging from under $15,000 to over $70,000 per pupil.

Per Capita Income. Per capita income in Denver is $2,597, somewhat below the suburban average of $2,650. Smaller cities range in income from under $2,000 to $2,722 in Boulder. Rural areas, despite their high property wealth, have an average per capita income of only $1,738, and there is considerable variation in income among the districts.[10]

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[7] Denver's high property tax base is due, in part, to the fact that 33 percent of its real property base is comprised of industrial and commercial property, compared to only 13 percent in Boulder. The state average is 24.9 percent.

[8] $v = .56$.

[9] $v = .44$.

[10] $v = .51$.

B. Tax Structure

Although a tax burden analysis for Colorado was not undertaken for this study, a brief discussion of state tax sources can provide some insight into the structure of state taxes. The major source of the general fund revenues is the personal and corporate income tax, followed in importance by sales and use taxes. Additional general fund sources are taxes on alcoholic beverages, cigarettes, inheritance and gifts. In 1969, 26.9 percent of general fund revenues were allocated to local governments for public education.

Since 66.7 percent of revenues are derived from local sources, primarily residential property taxes, local taxes for education are regressive. While the state tax structure is likely to be proportional, the combined state-local tax burden for education is no doubt regressive.

III. STUDENT CHARACTERISTICS

Of the total state enrollment, 17.4 percent is comprised of minority students, primarily Spanish-surnamed Americans. In Denver, 34.4 percent of the students are minority,[11] in suburbs only 5.8 percent. In smaller cities 17.6 percent of the students belong to minority groups and in rural areas, 15.8 percent. Among smaller cities, Pueblo City has a 39.4 percent minority enrollment, mostly Spanish-surnamed Americans, and Boulder has 4.2 percent. In rural areas, minority enrollment ranges from less than one percent to 42 percent.

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[11] In Denver, 14.1 percent of students are black, 19.2 percent Spanish-surnamed Americans. It should be noted that 76 percent of the state's total black enrollment (compared to only 32 percent of Spanish-surnamed) attend school in Denver. In one county (Dolores), American Indians comprise 5.9 percent of total enrollment.

IV. TEACHER EXPENDITURE DIFFERENTIALS

Average teacher salaries among school districts of Colorado are the highest in Denver -- $8,071. In suburbs, the average salary drops to $7,482, with a narrow range in salaries between districts. Smaller cities have average salaries of $7,500. This average is affected by the city of Boulder, which pays teachers $8,105, or more than any other sample district examined. Rural salaries in the sample range from $5,516 to $7,638, with an average of $6,879. The statewide average salary for teachers in Colorado (based on all school districts, rather than the sample districts), during 1968-1969, was $7,264.

Average teacher experience (Fall of 1969) for the state as a whole is nine years. Of all Colorado teachers, 61.6 percent had a B.A. degree, an additional 10.1 percent had up to 60 additional credits beyond a B.A., and 28.2 percent of all teachers had advanced degrees (MA or Ph.D.). Of all teachers in the state, 65.3 percent are women, primarily teaching in grades 1 to 6. In higher grades, the percentage of men exceeded women. Since high school teachers have more advanced training, average male teacher salaries are higher than those for females.

SUMMARY

Colorado is one of the two states selected for this study with low levels of state aid. It finances education primarily from local sources. State revenues in the sample districts provide less than 28 percent of total revenues for education. State revenues, as they are distributed both through a foundation program and as a flat grant, are equalizing to a limited extent, while federal aid has little impact on total revenue differences.

Revenues per pupil in Denver are sharply above the level of its suburbs, as well as the balance of the state. The major amount of Denver's revenues are from local revenue sources. Denver has a per pupil property tax base almost twice the suburban average, although per capita income in the city is slightly below that found in the suburbs. The combined tax structure for education, not examined in detail for this study, appears regressive, in view of high local funding primarily from property taxes.

Minority enrollment in Colorado, which is primarily Spanish-American, is concentrated in Denver. Two-thirds of all black students in the State of Colorado are located in Denver. Minority enrollment outside of Denver is primarily Spanish-surnamed American.

Average teacher salaries show wide differentials, the highest average salaries being in Denver, with suburban and smaller city salaries more than $1,000 below the Denver level. Average and starting salaries, as in other states, are the lowest in rural districts. Average teacher experience and proportion of advanced degrees to all degrees in Colorado closely approximate the average of other states examined in this study.

COLORADO
SAMPLE DISTRICTS
(1968 - 1969)

DISTRICT NAMES	COUNTY
Central Cities	
Denver	Denver
Suburban Areas	
Adams City	Adams
Adams-Arapahoe (Aurora)	Arapahoe
Brighton	Adams
Englewood	Arapahoe
Jefferson	Jefferson
Littleton	Arapahoe
Westminster	Adams
Sheridan	Arapahoe
Smaller Cities	
Boulder Valley	Boulder
Colorado Springs	El Paso
Durango	La Plata
Fort Collins	Larimer
Grand Junction	Mesa
Greeley	Weld
Longmont	Boulder
Pueblo City	Pueblo
Valley-Sterling	Logan
Trinidad	Los Animas
Air Academy	El Paso
Rural	
Akron	Washington
Alamosa	Alamosa
Pagosa Springs	Archuleta
Buena Vista	Chaffee
Burlington	Kit Carson
Crowley	Crowley
Delta	Delta
Dolores	Dolores
Douglas	Douglas
Eagle	Eagle
East Otero	Otero
East Yuma County	Yuma
Elizabeth	Elbert
Fort Morgan	Morgan

DISTRICT NAMES	COUNTY
Canon City	Fremont
Garfield	Garfield
Gunnison Watershed	Gunnison
Holly	Prowers
Holyoke	Phillips
Huerfano-Walsenburg	Huerfano
Julesburg	Sedgwick
Eads	Kiowa
Lake Co.-Leadville	Lake
Lamar	Prowers
Las Animas	Bent
Moffat	Moffat
Montezuma-Cortez	Montezuma
Montrose	Montrose
Meeker	Rio Blanco
Norwood	San Miguel
Pueblo Rural	Pueblo
South Routt	Routt
Summit	Summit
Sanford	Conejos
Lewis-Palmer (Monument)	El Paso

STATE OF COLORADO

DATA SOURCES

A major portion of the data for these analyses came from unpublished sources furnished by various state agencies. The following is a partial list of published sources also drawn upon for this study:

Colorado Department of Administration. *Fiscal Digest 1969-1970*. Denver: State of Colorado, March,1971.
Stat

Colorado Department of Education. *Salaries and Related Information: Fall 1968, and Fall 1969*. Denver: State of Colorado, 1969 and 1970.

Colorado Tax Commission, Division of Property Taxation. *1970 Sales Ratio Study: Vol. I, Residential and Commercial Properties*. Publication No. 114. Denver: State of Colorado, August, 1970.

Steepleton, Glenn M. *Colorado School District Budgets, 1969-1970-1971*. Vol. XVII, No. 12. Denver: Colorado Public Expenditure Council, June 11, 1971.

STATE OF NEW HAMPSHIRE
(1968 - 1969)

INTRODUCTION

New Hampshire's school finance system relies almost exclusively on local responsibility for public education financing. The state provides school districts with limited funds through a foundation program, amounting to 46 percent of all state aid.[1] There are also nine categorical programs, the largest of which is the School Building Aid Fund. Revenues from sweepstakes, and 40 percent of the receipts from the "Meals and Rooms" tax are distributed on a flat grant per pupil basis.[2] Among sample districts selected for this study, local revenues provide 81.9 percent of non-federal education aid to New Hampshire, while state revenues contribute the balance, or 18.1 percent. Of total education revenues, including federal aid, the distribution is 87.6 percent from local sources, 5.9 percent from state sources, and 6.5 percent from federal revenues.

The analysis of school finance undertaken in New Hampshire is based on a sample of 29 school districts[3] grouped by type of district as follows: one central city (Manchester) with an ADA of 12,790, two suburban school districts[4] nine smaller cities, and seventeen rural districts. The average number of students (ADA) of the sample districts is 2,562, the smallest of any state average in the study. The sample districts comprise 53.5 percent of total state ADA.

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[1] Under the State Foundation Aid Fund, the state provides a guarantee of $200 per elementary pupil (K-8) and $300 per secondary pupil (9-12). The local share is raised through a required 14 mills property tax. In those districts where that tax will not raise sufficient revenues to meet the foundation support level, the state makes up the difference.

[2] Of total state funds for current operating expenditures (capital outlay revenues are excluded from this analysis), approximately 60 percent comes from the state general fund and 40 percent from the sweepstakes and "Meals and Rooms" tax revenues.

[3] This sample was selected from a total of 190 school districts in 1968-69.

As noted in Chapter II, Vol. I, only limited data were collected for the State of New Hampshire. Thus, this section of the report is limited to an analysis of the impact of revenue sources on disparities, school district fiscal characteristics, and the distribution of the tax burden for the support of public education in this state.

I. REVENUE SOURCES AND THEIR IMPACT ON DISPARITIES

Total revenues amount to $715 per pupil in Manchester, $714 in the suburban districts, $713 in smaller cities, and $695 in rural areas. With this narrow range among types of districts, the disparities in total per pupil revenues among sample districts are the lowest of any state in the study.[5]

Local Revenues. Local revenues are the primary source of funding in New Hampshire, contributing 87.6 percent of all revenues for elementary and secondary education in the sample districts studied. Manchester provides $622 from local sources -- 88.6 percent of total revenues -- somewhat below the suburban average of $665, where local revenues comprise

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[4] In view of this limited sample, no conclusions can be drawn from city-suburban comparisons. One of the suburban districts, Salem, is part of the Lawrence-Haverhill SMSA, while the other, Goffstown, is part of the Manchester SMSA.

[5] v = .09.

92.8 percent of all education funds. Smaller cities provide $621, 87.0 percent of all revenues, while in rural areas, local revenues provide the least amount per pupil -- $603, or 86.6 percent of the total. The range in local funding is from a high in Orford, a rural district, which raises $871 per pupil, to Newport, also a rural district, which provides only $471 in local revenues. The disparities in local revenues among all districts are not substantial.[6]

State Revenues. The state government provides 5.9 percent of all revenues for elementary and secondary education in the sample districts, the lowest share of any state in the nation in 1968-69. The state's central city, Manchester, receives $35 per pupil. Suburban areas also receive an average of $35 per pupil, which is slightly above the average for smaller cities of $33. The average state contribution in rural areas is $64, the highest of the four district types. The range within both smaller city and rural districts is substantial. Among smaller cities, Berlin receives just over $15, or less than half the smaller cities' average. In contrast, Portsmouth receives $56.[7] Among rural areas, state aid to Milton is only $17, while Merrimack receives $120.[8] State revenues, although only a minor amount of total revenues, are generally concentrated in districts with low local revenues. The five districts with the lowest local revenues receive $82 in state aid, those with highest local revenues only $36. Thus, although the percentage of state aid is low, the disparities in local revenues are reduced by the inclusion of state aid.[9]

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[6] $v = .09$.

[7] The coefficient of variation for state aid to smaller cities is .44.

[8] The coefficient of variation for state aid to rural areas is .52, the highest among the four types of districts in New Hampshire.

Federal Revenues. The federal government provides 6.5 percent of the revenues for education in New Hampshire. This aid is concentrated in the central city, Manchester, which receives $45 and smaller cities, which receive $60. Suburbs average only $15, and rural areas $28.[10] Among smaller cities, Portsmouth receives the greatest amount of federal funds, $158, primarily impacted areas aid, and Livonia receives the least, $11. In rural areas, the range is from Alton which receives $5 to Lebanon which receives $97 in federal funds. Districts with least local revenues receive twice the level of federal funds compared to districts with highest local revenue, tending to equalize disparities in local revenues among the districts.[11]

II. FISCAL CHARACTERISTICS OF SCHOOL DISTRICTS

A. Income, Per Pupil Property Values, and Property Taxes

Per Capita and Per Pupil Income. The disparities in per capita income within New Hampshire are the lowest of any state in the study.[12] The statewide average per capita income of the sample districts is $2,249.

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[9] The coefficient of variation for local revenues is .13. The addition of state aid reduces this value to .11.

[10] New Hampshire has practically no minority enrollment -- less than 1 percent of state ADA. In Manchester, it is 0.6 percent. Portsmouth (classified as a smaller city), which has a defense facility, is the only sample district in the entire state which has a minority enrollment above one percent.

[11] The coefficient of variation for local revenues of .13 drops to .11 with the inclusion of state funds, and .09 when federal funds are added.

[12] v = .07.

The per capita income of the central city is $2,282, of the suburbs, $2,314, smaller cities $2,276,[13] and rural areas, $2,154. Thus, none of the district types deviates much from the state average.

However, in the case of per pupil income, there are sharp differences by type of district. The per pupil income of the central city is $17,477, but the suburban average is only $9,613. This implies either drastic demographic differences or differences in non-public school enrollment, or both, between the city and the two suburbs. Per pupil income for smaller cities is $13,241, and for rural areas $9,743. The statewide average is $12,799. This also implies substantial demographic differences, that is, the proportion of school age children to total population is much lower in smaller cities than in rural areas. Per pupil income shows a considerably greater variation between school districts compared to per capita income.[14]

Property Values and Property Taxes. Per pupil property values are the highest in Manchester, $35,449, compared to the state average of $28,067.[15] Suburbs average only $23,548, smaller cities $28,367, and rural areas $23,927. Smaller city per pupil property values range from $23,809 in Portsmouth to $41,681 in Berlin. Among rural areas, the range is wider, from $13,882 in Merrimack to $69,674 in Alton.

Effective property tax rates per $100 market value for schools and total property tax rates by type of district are shown in Table NH-1. As this table shows, taxes for schools in Manchester are lower than in other districts, while suburban districts have the highest tax rate. However, Manchester's total property tax is at the level of the state average. Cities in New Hampshire, as in other states, allocate a smaller share of their property tax revenue for education compared to suburbs and rural areas.

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[13] The range among smaller cities is from $1,967 in Berlin to $2,470 in Nashmer.

[14] The coefficient of variation is .26, compared with .07 for per capita income.

[15] Industrial and commercial property is concentrated in Manchester, where it comprises 31.5 percent of total real property, compared to less than 24 percent for the balance of the state.

TABLE NH - 1

PROPERTY TAX RATES FOR PUBLIC SERVICES

	Schools	All Public Services	Percent Schools of All Public Services
Central City	$1.55	$3.62	42.8
Suburban	2.71	4.29	63.2
Smaller Cities	1.97	3.81	51.7
Rural Districts	2.38	3.30	72.1
STATE AVERAGE	2.06	3.69	55.8

B. State and Local Taxes for Education

New Hampshire has neither personal nor corporate income taxes, nor a broad-based state sales tax. State revenues depend primarily on tobacco and alcohol taxes, a highly regressive head tax, and sales taxes on meals and lodgings, part of which are shifted to out-of-state residents. In addition, revenues from sweepstakes and part of the Meals and Rooms" tax are allocated for schools on a per pupil basis.

New Hampshire allocates only 16.8 percent of the state general fund for elementary and secondary education -- less than half of the proportion allocated by other states in this study. The total state tax burden for public education, which is somewhat regressive, ranges from 0.6 percent for households in the $2,000 to $2,999 class to 0.4 percent for households earning over $15,000 in urban areas.

Local revenues for education are comprised primarily of taxes on real property[16/] and tuition payments, with property taxes accounting for more than 90 percent of the total. Despite the regressive nature of the property tax and the dominance of this source of revenue for public education, local property taxes are only slightly higher in this state compared to New York State.[17/]

Total tax burdens for education are 9.1 percent for those in the $2,000 to $2,999 income group, 3.8 percent for the $7,500 to $9,999 income households, and 2.4 percent for households earning $15,000 and over.

Since rural districts have slightly higher property tax rates than urban areas, overall tax burdens for education for all income groups are higher in the rural areas of this state.

[16/] Only 7.4 percent of the property tax is on personal property.

[17/] It should be noted that New York derives a larger share of its property taxes from personal property compared to New Hampshire.

SUMMARY

Although New Hampshire provides less state aid for education than any other state in the nation, revenues provided by the state to local districts have an equalizing effect. Expenditure differentials between school districts in New Hampshire, as well as per capita income differentials, are found to be lower than in any of the other states examined in the study. However, if per pupil income is utilized as a measure of fiscal capacity, there are substantial differences between Manchester and other urban school districts.

Both state taxes and local taxes utilized for education are found to be regressive. However, despite the dominance of the local property tax as the source of revenue for schools, overall school tax rates are below the level of New York State.

NEW HAMPSHIRE
SAMPLE DISTRICTS
(1968 - 1969)

DISTRICT	COUNTY
Central City	
Manchester	Hillsborough
Suburban	
Goffstown	Hillsborough
Salem	Rockingham
Cities over 10,000	
Berlin	Coos
Concord	Merrimack
Dover	Strafford
Keen	Cheshire
Laconia	Belknap
Nashua	Hillsborough
Portsmouth	Rockingham
Rochester	Strafford
Somersworth	Strafford
Rural	
Alton	Belknap
Belmont	Belknap
Conway	Carroll
Exeter	Rockingham
Franklin	Merrimack
Hopkinton	Merrimack
Hudson	Hillsborough
Lebanon	Grafton
Littleton	Grafton
Marlboro	Cheshire
Merrimack	Hillsborough
Milford	Hillsborough
Milton	Strafford
Newport	Sullivan
Orford	Grafton
Pelham	Hillsborough
Pittsburg	Coos

STATE OF NEW HAMPSHIRE

DATA SOURCES

A major portion of the data for these analyses came from unpublished sources furnished by various state agencies. The following is a partial list of published sources also drawn upon for this study:

New Hampshire Controller's Office. Annual Report 1970. Concord: State of New Hampshire, 1970.

New Hampshire Department of Administration and Control. Fiscal Facts: State of New Hampshire, Fiscal Year Ending June 30, 1968. Concord: State of New Hampshire, 1968.

New Hampshire Department of Education. Valuations, Property Tax Assessments, and School Tax Rates of School Districts, 1968-69. Concord: State of New Hampshire.

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